

Feed.

JERÓNIMO MARTINS WORLD'S MAGAZINE

N2.
DEC 2016

PULSE

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LOGISTICS
TAKING THE PULSE
OF BUSINESS

BREXIT
MORE QUESTIONS
THAN ANSWERS

COLOMBIA
THE POWER
OF SUPER BEANS

Feed.

JERÓNIMO MARTINS WORLD'S MAGAZINE

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14.19



THE PULSE OF BUSINESS

The bustle of a company is provided by its many delivery elements as it is the key to product mobility. In this section, it is showcased the circulatory system of Jerónimo Martins' food distribution business.



PASSION FOR FOOD

20.27

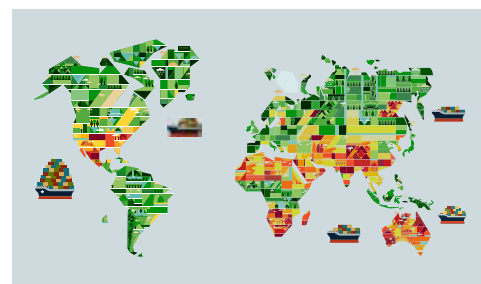
Pulses take the centre stage in three traditional recipes from Poland, Colombia and Portugal.

THE ART OF PULSE

32.37



Timekeeping devices have been used throughout history. This piece illustrates its many iterations over history as well as undertakes a visual exploration of iconic and famous timepieces around the pop culture firmament.



WORLD PULSES MAP

28.31

A map that provides much needed clarity on such questions as: which country is the largest producer, importer and exporter of pulses in the world? And do we eat more of them than our ancestors?



WATCHMAKING COURSE

38.47

The Watchmaking course at Casa Pia, that first began 120 years ago, has an astounding 100% employability rate and teaches its students a timeless art.

CHECKING THE PULSE.

The starting point for the second issue of *Feed* was inspired by the United Nations defining 2016 as the International Year of Pulses, an effort regarding sustainable food production and nutrition.

We took the notion of “Pulses” and approached this magazine with a broader concept of what it can mean: food itself, but also beat, rhythm, pace, time and emotions.

SLOWFOOD PULSES

64.73



2016 is the International Year of Pulses, an initiative dedicated to the promotion of legumes. Can these superfoods be an overlooked ingredient in a healthy lifestyle? We gather a nutritionist, a horticulture expert and an actress to discuss this over a meal.



HEARTBEAT HEROES

96.103

Celebrating three decades of heart transplantation, this piece focuses on the stories of real life heroes: the doctors that performed the first ever heart transplants – difficult, hard and long surgeries – in Poland, Portugal and Colombia.



SUPER BEANS

104.113

If iron deficiency is the most common and widespread nutritional disorder in the world, then Colombia is taking measures to respond to this issue: by cultivating two new species of superbeans that enhance iron and zinc levels.

AND MORE...

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ANTÓNIO GUTERRES

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CAPTAIN OF THE SEAS

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PORTUGAL EUROPEAN CHAMPION



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BREXIT: ONE WAY OUT?

Against all expectations, the UK's startling decision will have lasting repercussions in the fate of the European Union. Four specialists try to cast some light on Brexit's implications for both Poland and Portugal.

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“THE LONG UNMEASURED PULSE
OF TIME MOVES EVERYTHING. THERE
IS NOTHING HIDDEN THAT IT CANNOT
BRING TO LIGHT, NOTHING ONCE
KNOWN THAT MAY NOT BECOME
UNKNOWN. NOTHING IS IMPOSSIBLE.”

SOPHOCLES
497/496 BC – 406/405 BC



**AGNIESZKA
BIELEWSKA**

**PROFESSOR AT SWPS
UNIVERSITY OF SOCIAL SCIENCES
AND HUMANITIES, WROCLAW**

Agnieszka Bielewska works as an Assistant Professor at SWPS University of Social Sciences and Humanities in Wrocław, Poland. She is an expert in international migration affairs, diasporic communities and nationalism. She has done research on Polish migrants in the United Kingdom and on highly skilled migrants in Poland. Bielewska also explores the impact of globalization on national identity.



**ANDRZEJ
ARENDAISKI**

**PRESIDENT OF THE POLISH
CHAMBER OF COMMERCE**

Co-founder and president of the Polish Chamber of Commerce, Andrzej Arendarski is also the President of the Polish-American Foundation for Small Business Advisory. In 2008 he became Vice-President of EUROCHAMBRES. In 1992 he was the Minister for Foreign Economic Cooperation. Awarded with many national and foreign orders, including among others the Commander's and Knight's Cross of the Order of Polonia Restituta and the Order of Smile.



**CARLOS
DANIEL**

**JOURNALIST AT RTP - PUBLIC
PORTUGUESE TELEVISION
CHANNEL**

He began his career as a journalist at Rádio Comercial in 1989. Two years later, in 1991, he moved to the public broadcasting TV station in Portugal (RTP) and is currently the deputy director of RTP Porto. He has been a soccer commentator on numerous television programs and is the author of the book “Futebol a Sério” (“Football for real”), where he combines an encyclopedic knowledge of the sport and a natural aptitude to explain it to the public.



**CLAUDIA
ANGARITA**

**NUTRITIONIST, DIRECTOR
OF THE COLOMBIAN CENTER
FOR INTEGRAL NUTRITION**

Claudia Angarita is a nutritionist and dietician, with a degree from Pontificia Universidad Javeriana, in Bogotá, Colombia. She is a specialist in Hospital Administration, having also extensive experience in Clinical Nutrition. Angarita is the former president of the Colombian Association of Clinical Nutrition, being currently the director of the Colombian Center for Integral Nutrition. She is also the Secretary of Colombian College of Nutritionists and Dietitians.



**FILIFE RIBEIRO
DE MENESES**

**PROFESSOR OF HISTORY,
MAYNOOTH UNIVERSITY**

Filipe Ribeiro de Meneses is a Professor of History at Maynooth University, in Ireland. He has also lectured at Trinity College Dublin and at Brown University, USA. Ribeiro de Meneses has published extensively on many aspects of contemporary Portuguese history, including the First World War, Salazar's New State, and the impact of decolonization. He is also a member of the Association of British and Irish Lusitanists and of the Royal Irish Academy Committee for Historical Sciences Research.



**TOMASZ
WRÓBLEWSKI**

**JOURNALIST, PUBLICIST
AND COMMENTATOR
ON CURRENT AFFAIRS**

Currently the Vice-President of Warsaw Enterprise Institute, Tomasz Wróblewski is the former editor-in-chief of many prestigious Polish magazines, such as “Newsweek Polska”, “Wprost”, “Rzeczpospolita” and others. He studied at the Faculty of History, University of Warsaw, until 1985, and graduated from the Faculty of Political Science at the University of Houston. In 1992, Wróblewski wrote a book about the then newly-elected 42nd President of the United States Bill Clinton.

Editorial.



PEDRO
SOARES
DOS
SANTOS

FEEL THE PULSE

The United Nations defined 2016 as the International Year of Pulses aiming at increasing public awareness of the health benefits of these seeds as part of sustainable food production and nutrition.

This was our starting point for the number two edition of *Feed* that you now have in your hands. Following the spirit of this magazine, we took the word “Pulses” and turned it into a whole concept that comprehends beat, rhythm, pace, time, emotions and, of course, the food itself.

We will take you through three typical dishes of our beloved Portugal, Poland and Colombia that, relying on pulses, are an intrinsic part of these countries cultural gastronomic heritage. You will witness a conversation around

pulses’ advantages as a protein source and its role as a soil fertilizer. You will also discover how superbeans in Colombia are making a difference in the fight against iron and zinc structural deficiencies.

When taking the “s” out of the word, we are left with *pulse*, meaning that we enter into a world of movement, beat and rhythm. This entails many different things in this issue: from celebrating the new impulse for peace in Colombia with the Nobel awarded to the President Juan Manuel Santos to the nomination of the Portuguese António Guterres as the new United Nations Secretary-General as well as introducing you to the man who wrote the jingle that became our Colombian chain’s brand voice in a country

where music is part of the nation’s soul. Pulse is also present when we take you in a brief historical journey throughout time keeping devices that show how Mankind has been trying to catch up with Time since ever. Or when we celebrate what we called our “heartbeat heroes” – the men who first performed a heart transplant in the three countries where our Group has its businesses. And, talking about business, we share with you the hidden beat behind our operations’ strength: our logistics heart. Food distribution is a world of constant movement and fast pace. As a circulatory system, we work around the clock to deliver food to every single cell of our corporate body: our stores.

A small group of Portuguese scouts that our Group sponsored to join the World Youth Days in Krakow, Poland, report to us how it felt to be part of this huge and meaningful event that gathered around two million people praying together for peace in the world. And we couldn’t help but celebrating here how we, Portuguese, felt when winning the European Football Championship. On that day – July 11 - the joyful heart of a nation, made up of over 10 million hearts and souls, beat as one.

On the downside, we have Brexit. Seeing the United Kingdom leave the European Union was a very upsetting event that triggered a lot of questions still to be answered. We bring you perspectives from Portugal and Poland taken from different angles to enrich the debate. We hope you spend an enjoyable time with *Feed* and I personally take this opportunity to send my season’s greetings and best wishes of a happy new year from the bottom of my heart. ●

PL L L L

Pedro Soares dos Santos,
Chairman of the Jerónimo Martins Group

Following the spirit of this magazine, we took the word “Pulses” and turned it into a whole concept that comprehends beat, rhythm, pace, time, emotions and, of course, the food itself.

Freshⁱⁿ

SOUPS FROM OUR KITCHEN

The Jerónimo Martins Group has created from scratch a ready-to-eat soup factory, in Parzniew, in the outskirts of Warsaw, to “feed” the Biedronka chain of stores in Poland. The concept involves using the freshest vegetables, supplied by local producers who already work on a daily basis with the Biedronka chain. An innovative solution is used to produce these soups, which involves a quick-

freezing process that enables the products to have a longer life without the usual use of preservatives. These “Soups from Our Kitchen” come in three flavours: cream of tomato with beef tomatoes, cream of broccoli and cream of cauliflower, and they may be eaten by vegetarians and vegans, as no ingredients of animal origin are used. This factory enabled 40 new jobs.

1.

A cream soup (450 gr.) costs regular 3.99 zlotys (around 0.90 euros). The first batch was marketed in Warsaw-based Biedronka stores. The number of stores offering the soups will gradually expand.



POLISH STUDENTS ARE AMONG THOSE WHO MOST STUDY FOREIGN LANGUAGES



© Klaus Vedfelt / Getty Images

Polish schoolchildren are among those who most study foreign languages at school in comparison to other European Union (EU) countries, a recent study by the EU statistics office Eurostat reveals. In 2014, 97.7% of Polish primary schoolchildren were learning at least one non-native language, a percentage that is higher than the European average of 83.7%. In countries such as Cyprus, Luxembourg, Malta, Croatia, Italy and Austria, the percentage was similarly high. English was the most-spoken foreign language in Poland (94.8%) ahead of German at 6.2%. Another of the study's most significant findings was that over 80% of primary schoolchildren across the entire EU were studying at least one foreign language during the year in question. Only 5% were studying two or more. Once again, English was the most popular; some 17 million primary schoolchildren across Europe were studying this language.

WEB SUMMIT

2.

At the top of the European Union, almost 98% of Polish primary school students learn, at least, one foreign language, behind only Cyprus, Luxembourg, Malta, Croatia, Italy and Austria.

This year's Web Summit, which has been called “the best technology conference on the planet”, was hosted for the first time in Lisbon, Portugal after five editions in its original home -Dublin, Ireland. The event took place from 7 to 10 November. Web Summit's co-founder and CEO, Paddy Cosgrave, gathered more than 50 thousand attendees and as many as 50 media titans and entrepreneurs – from all corners of the world wide web. Tech directors from Facebook and Amazon were present, as well as Facebook Messenger's director, Tinder's co-founder, with Imgur and SoundCloud also in attendance. There were some heavy hitters from other media areas, such as actor and filmmaker Joseph Gordon-Levitt, singer and producer Ne-Yo, and fashion world investor Miroslava Duma. Throughout the three and a half days, there were panels such as “The truth about the music industry”, “Women making media”, “Millennials to their own devices” or “Social media dilutes your brand”. Paddy Cosgrave also warned against the negative impact that technology has in the world. On the hopeful side, the European Commission pledged 1 billion euros to support European start-ups and a myriad of companies and entrepreneurial ventures have, with the Web Summit, gained access to funding and potential partnerships.



© Patrícia de Melo Moreira/APPI/Getty Images

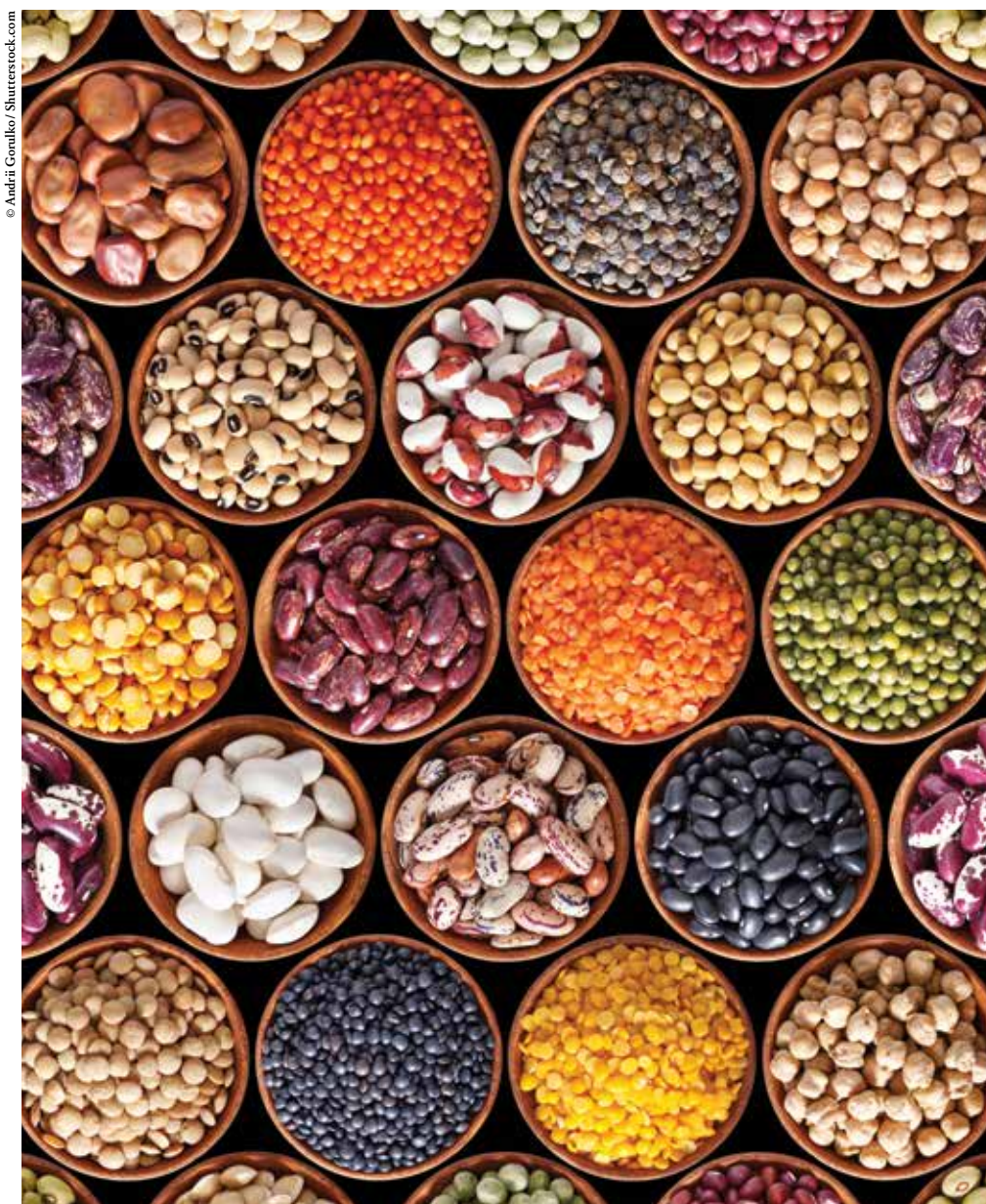
3.

Europe's largest tech event Web Summit was held at Parque das Nações in Lisbon from November 7 to 10.

Freshⁱⁿ

NEWS FROM OUR WORLD

INTERNATIONAL LEGUME SOCIETY GATHERS IN LISBON 4.



In the year designated by the UN as the International Year of Pulses, the International Legume Society and the Universidade Nova de Lisboa's (New Lisbon University) ITQB – Instituto de Tecnologia Química e Biológica António Xavier (António Xavier Institute of Chemical and Biological Technology) organised the Second International Legume Society Conference, which took place in Tróia, near Lisbon, from 11 to 14 October. The aim of the event, which was attended by dozens of Portuguese and international specialists, was to draw attention to the ever-increasing need for more sustainable farming and to promote food safety and healthier diets by choosing to grow leguminous crops. Among those attending were Hakan Bahceci, president of Hakan Foods and former president of the Global Pulse Confederation, Marie-Hélène Jeuffroy, director of research at the French National Institute for Agricultural Research, Jens Stougaard, from the Molecular Biology Department at the University of Aarhus in Denmark, Maria Carola Vaz Patto and Nuno Almeida from the ITQB, and Alexandra Seabra Pinto, researcher at the Instituto Nacional de Investigação Agrária e Veterinária (Portuguese Institute for Agrarian and Veterinary Research). The topics discussed during the event included the quality of pulses and their nutritional capacity, genetic resources and the marketing and economic impact of pulses.

Pulses are the edible seeds of plants in the legume family. FAO recognizes 11 types of pulses: dry beans, dry broad beans, dry peas, chickpeas, cow peas, pigeon peas, lentils, Bambara beans, vetches, lupins and pulses nes.

COLOMBIA'S FINEST NATURE PARKS ON GOOGLE STREET VIEW

The Tayrona National Natural Park is a protected area in the Colombian northern Caribbean region, within the jurisdiction of the Department of Magdalena.



5.

In September 2016, images were published on Google Street View showing a vast array of 360° images of nine of Colombia's best-known nature parks. Now these magnificent landscapes, seascapes and jungle scenery can be admired from anywhere on the planet. The images were taken over a period spanning more than eighteen months; a Herculean effort, given that some of the routes used by the photographers are only accessible on foot.

Captured using the 360° device known as the "Trekker", the images are part of an initiative being run in partnership with the National Parks of Colombia. The aim is to divulge both the country's extensive and splendid biodiversity and the wide range of places that can be visited. The nine featured nature parks include tourist destinations such as the Sierra Nevada de Santa Marta and the Tayrona National Park, both of which have been designated as "Biosphere Reserve of Man and Humanity" by UNESCO.

The aim of the National Parks of Colombia is to use this initiative to foster and boost the potential of ecotourism in these places, showing people that apart from the beauty and bounty of these areas, they are places which are still relatively protected from aggressive tourism.





Jerónimo Martins' Distribution Centre, in Azambuja, 50 km northeast of Lisbon, is the Group's main logistics hub in Portugal.

TAKING THE PULSE OF BUSINESS

The Food Distribution business has a pulse of its own, almost invisible to those who step into our stores in Poland, Portugal and Colombia. Around 30 logistic centres carefully aligned with the needs of thousands of stores strive to meet the expectations of millions of customers day in, day out.


POLAND

*FRESH PRODUCTS
EVERY DAY*



IN POLAND

Biedronka is the largest Food Retail chain in the country. It has 15 Distribution Centres, with an area of more than 360,000 sqm, which ensure high efficiency of supplies to around 2,700 stores in over 1,000 cities and towns throughout the country. The fleet operates more than 1,000 delivery lorries and is regularly replaced with the most recent European emission compliant models. Straight from the trailers, fresh products make their way to store shelves. Biedronka was the first chain in Poland to introduce the food safety management system ISO 22000, which concerns food safety during the storage and distribution processes.

Boxes 
3,600,000

Boxes received and shipped daily
by Biedronka's Distribution Centres

4,323
Employees



15 **Distribution
Centres**

 **Delivery
Lorries**
1,000

*SPEED
DOCKING*

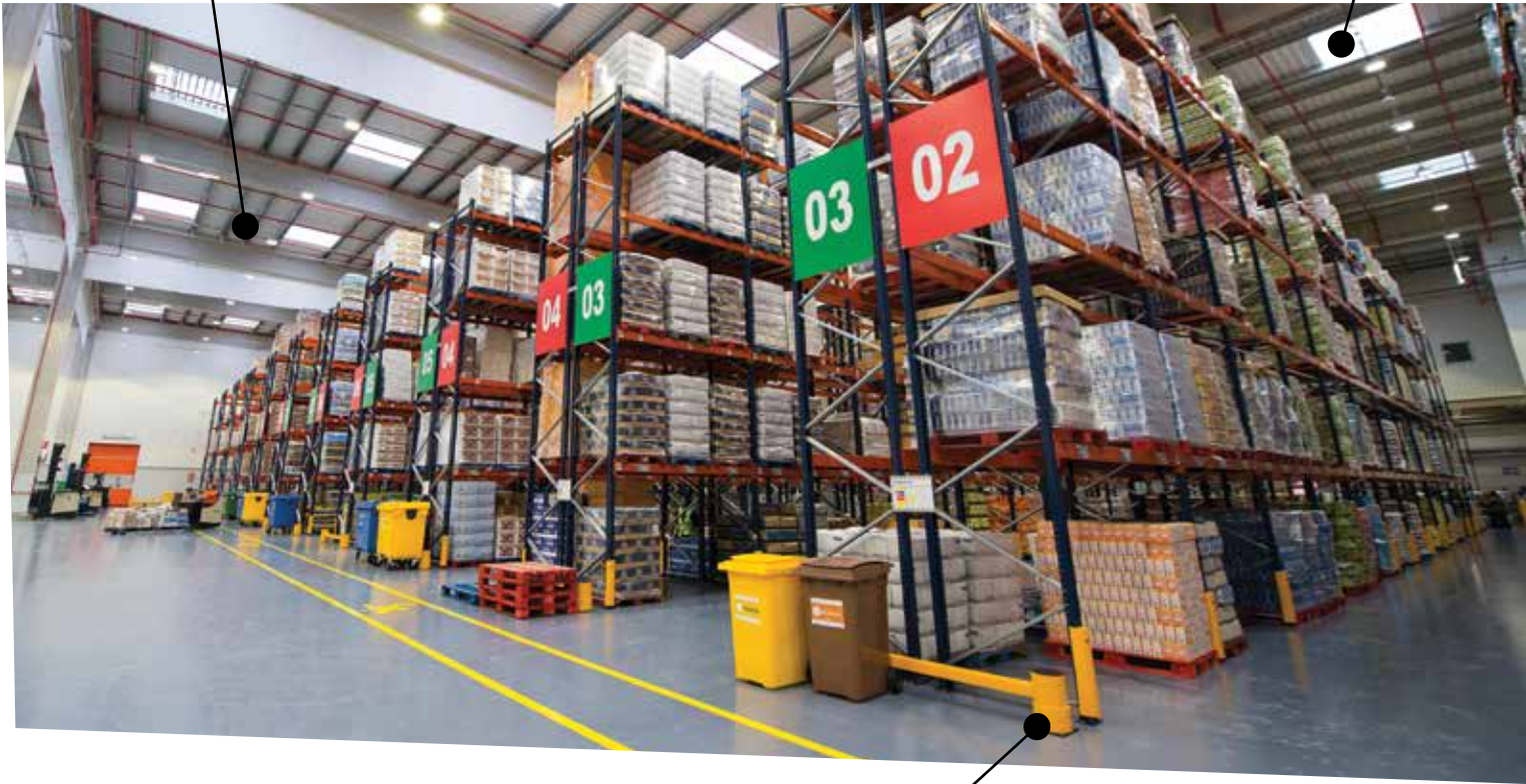
The Ruda Śląska Distribution Centre came in first at the 2nd edition of the Speed Docking competition in the discount category.

PORTUGAL

WITH operations in both retail and wholesale, the Jerónimo Martins Group's chains in Portugal – Pingo Doce and Recheio, leaders in supermarkets and cash & carry, respectively – move a combination of more than 1,700,000 boxes on a daily basis in a network of 10 Distribution Centres that span through more than 190,000 sqm. Portugal's fleet of lorries cover 42 million km every year. The logistics area employs more than 1,600 employees and has more than 1,500 suppliers.

1,600 Employees

42 million km covered every year



1,700,000 Boxes Received and shipped daily to a combined network of more than 450 stores in Portugal.

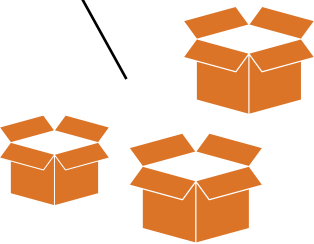
517,710 Number of kms covered each month

212 Employees in logistic operations



3 Distribution Centres

COLOMBIA



THE Jerónimo Martins Group began operating in Colombia in March 2013, through the Ara neighbourhood stores. It has three Distribution Centres that move a total of more than 158,000 boxes every day. The logistics area employs over 200 people and its fleet of lorries covers more than 500,000 km every month.

158,265 Boxes Received and shipped daily.

Feed.

HERONIMO MARTINS WORLD'S MAGAZINE

PASSION *for* FOOD

In the International Year of Pulses, “Feed” takes you on a journey of taste and flavours through Poland, Portugal and Colombia. The king ingredients of these traditional dishes are pulses, in a tribute to the historical importance and nutritional value of these edible seeds from around the world.



CHEF DIOGO NORONHA

AFTER TRAINING AT THE “NATURAL GOURMET INSTITUTE FOR HEALTH AND CULINARY ARTS” IN NEW YORK, HE INTERNTED AT THE 3-MICHELIN STAR RESTAURANT “PER SE”, IN NY. HE THEN MOVED TO BARCELONA AND TO “MOO”. HE EVENTUALLY RETURNED TO LISBON AND AFTER EXPERIENCES IN SEVERAL RESTAURANTS HE IS ABOUT TO EMBARK ON A NEW PROJECT OPENING SOON IN THE PORTUGUESE CAPITAL.



Feed.

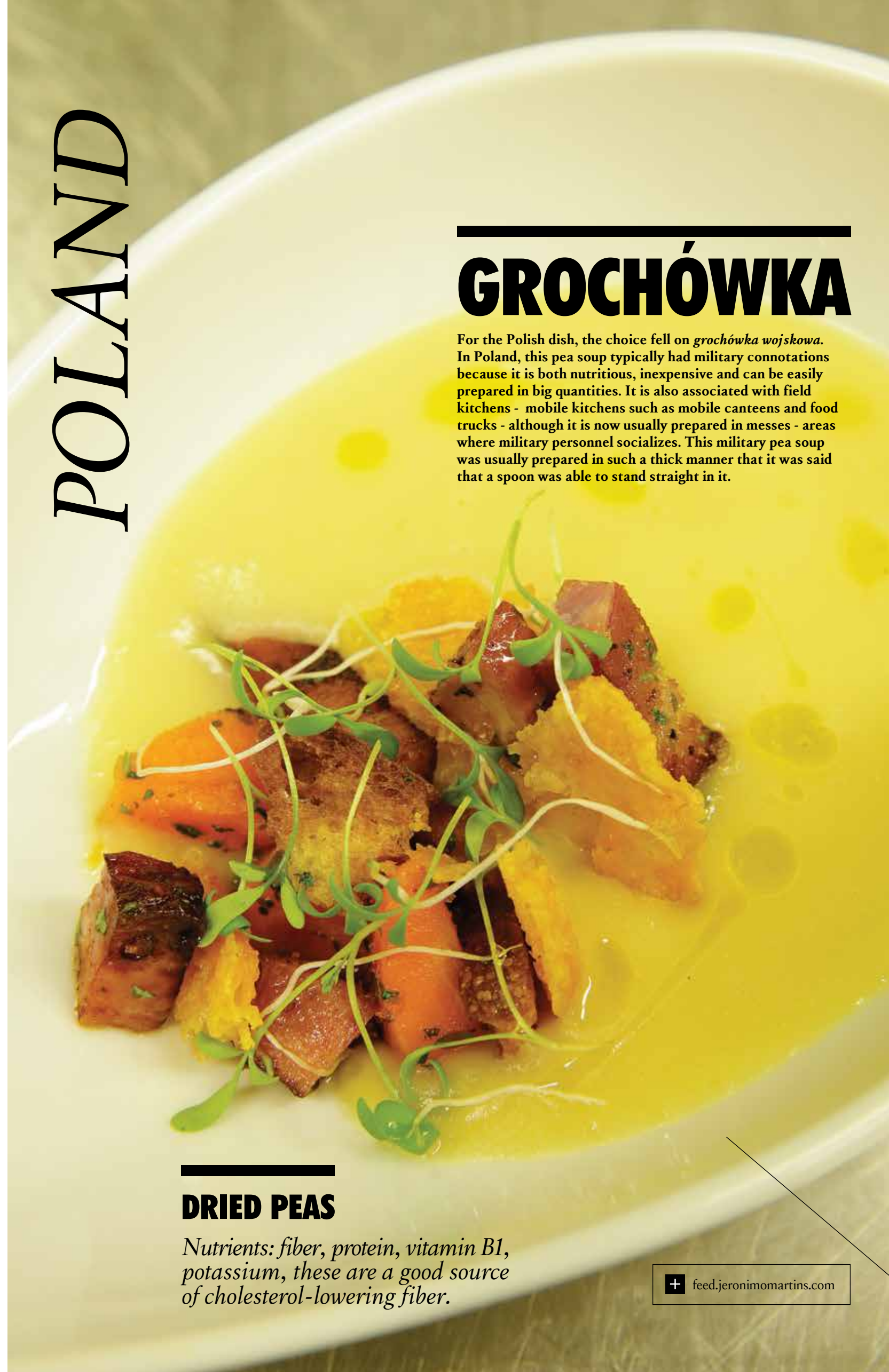
JERONIMO MARTINS WORLD'S MAGAZINE



POLAND

GROCHÓWKA

For the Polish dish, the choice fell on *grochówka wojskowa*. In Poland, this pea soup typically had military connotations because it is both nutritious, inexpensive and can be easily prepared in big quantities. It is also associated with field kitchens - mobile kitchens such as mobile canteens and food trucks - although it is now usually prepared in messes - areas where military personnel socializes. This military pea soup was usually prepared in such a thick manner that it was said that a spoon was able to stand straight in it.



DRIED PEAS

Nutrients: fiber, protein, vitamin B1, potassium, these are a good source of cholesterol-lowering fiber.

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COLOMBIA

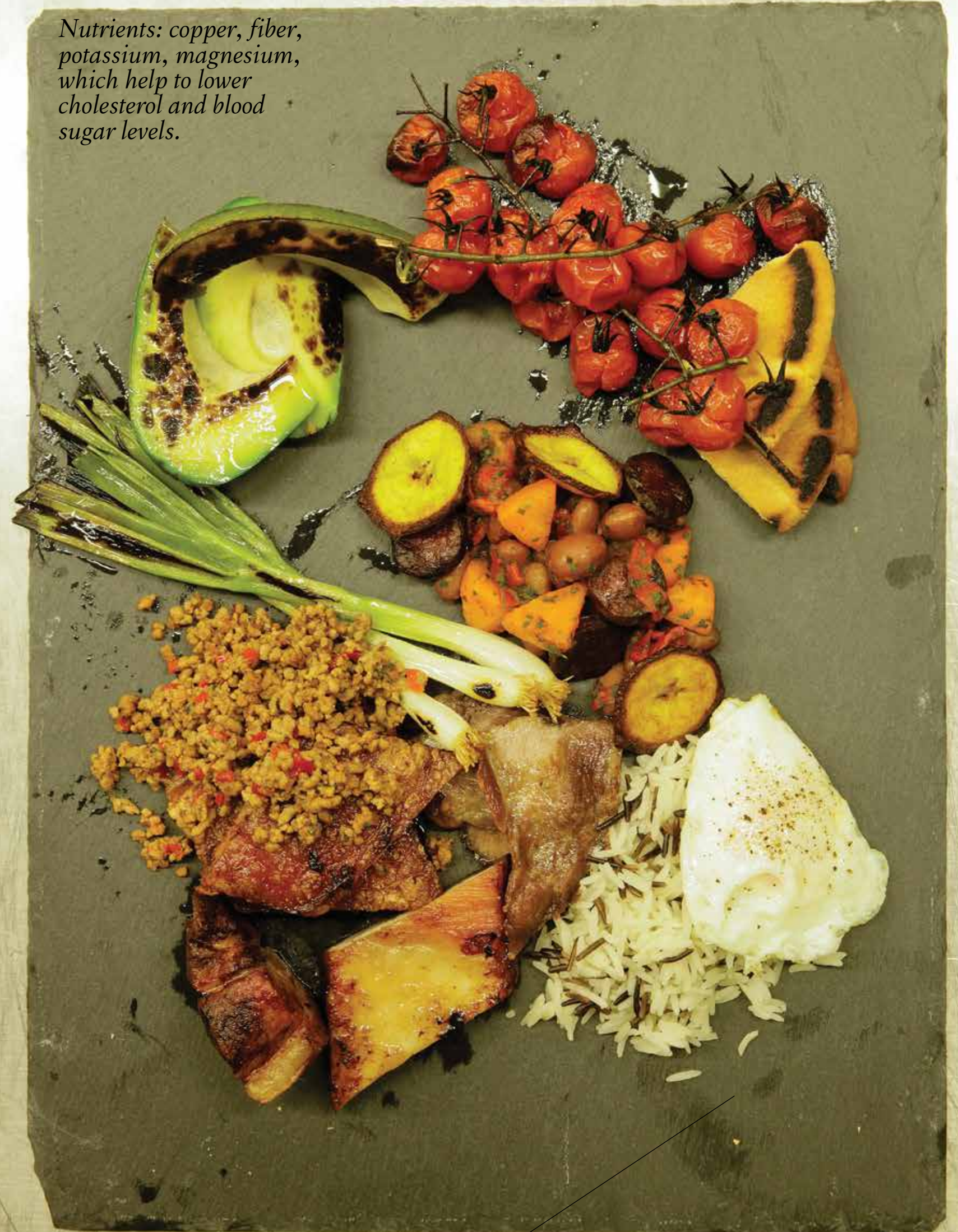


BANDEJA PAISA

This typical dish – which is also known as *bandeja de arriero*, *bandeja montañera* or *bandeja antioqueña* – has been Colombia's national dish since 2005. It hails from the Antioquia department of Paisa Region in the northwest of Colombia that also includes the Andes. The influences come from the indigenous peoples that first lived there, but also from colonial Spaniards and Africans. Its origin, a hefty nourishing meal with a great variety and abundance of ingredients including eggs, pork belly, banana or avocado, comes from being a wrapped, single meal that accompanied men in their journeys.

KIDNEY BEANS

Nutrients: copper, fiber, potassium, magnesium, which help to lower cholesterol and blood sugar levels.



Feed.

JERÓNIMO MARTINS WORLD'S MAGAZINE



MEIA DESFEITA

This meal originated from Lisbon, specifically from the traditional neighborhood of Mouraria, and uses as its main ingredients chickpeas, codfish and eggs. It has been mentioned by many well-known Portuguese novelists and writers such as Eça de Queirós and Ramalho Ortigão. For a long time, the *meia desfeita* (*de bacalhau*) has been known as a meal especially consumed by underprivileged people. Its name, in fact, comes from the fact that the poorer asked for *half* (“meia”) a helping. It is also a dish that is traditionally prepared after Christmas Eve, using its dinner leftovers.



CHICKPEAS

Nutrients: manganese, phosphorus, iron, zinc, which are packed with antioxidants that decrease cardiovascular risks.

PORTUGAL

P TRACKING *pulses* **AROUND THE WORLD**

Which country is the largest producer and importer of pulses in the world? And the largest exporter? Do we eat more pulses than our ancestors did? In this map, you will find the answers to those questions, and many more.

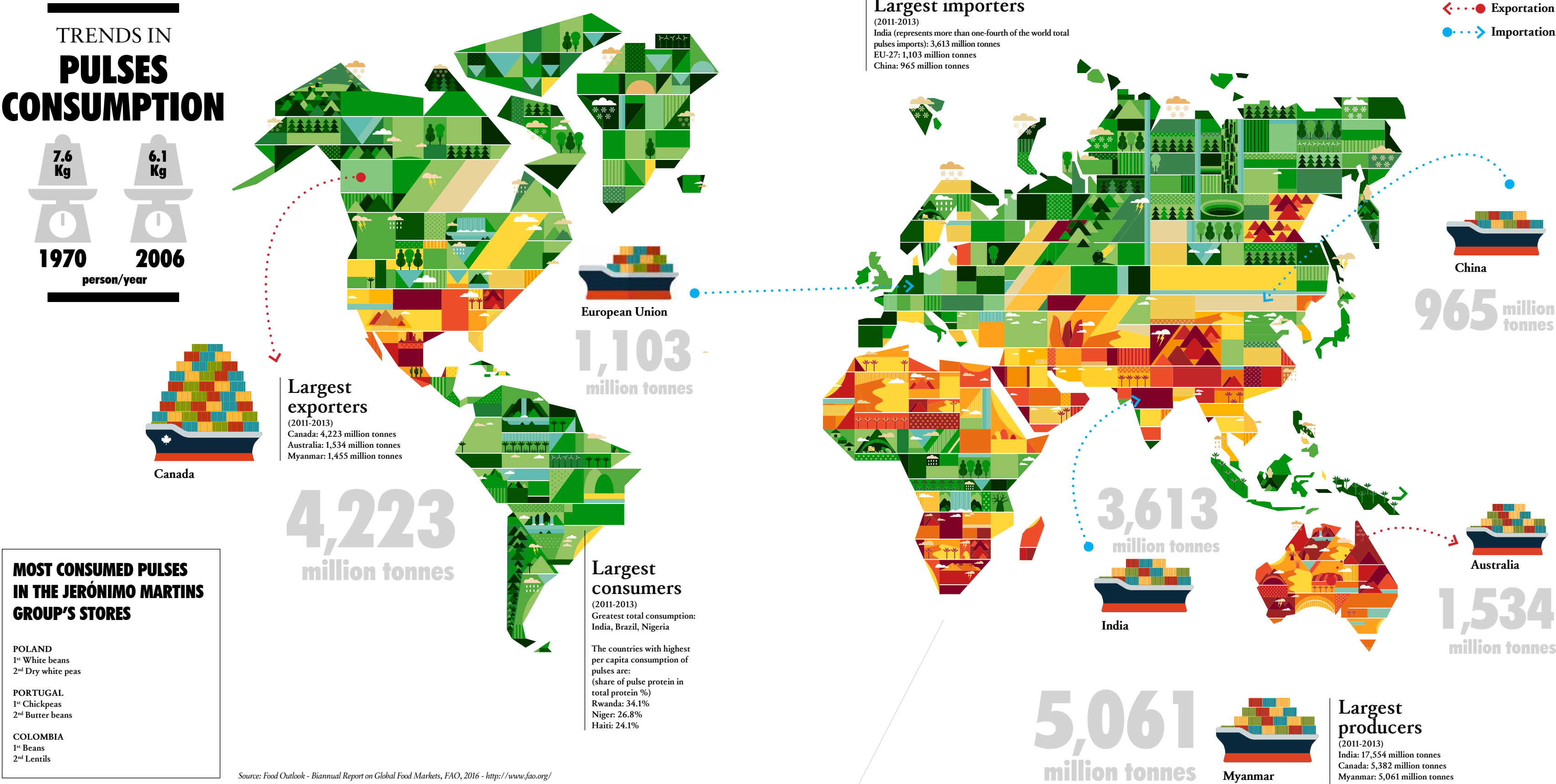


THE LARGEST

EXPORTERS, IMPORTERS, PRODUCERS AND CONSUMERS

Some of the most widely consumed types of pulses include dried grain legumes like kidney beans, navy beans, faba beans, chickpeas, dried or split peas, mung beans cowpeas, black-eyed peas and several varieties of lentils, as reported by Food and Agriculture Organization of the United Nations (FAO). As of 2013, India is the world's largest producer and importer of pulses and Canada is the largest exporter.

The consumption of pulses, in *per capita* terms, has seen a slow but steady decline in both developed and developing countries, dropping from 7.6K/person/year in 1970, to 6.1K/person/year in 2006. What can explain this? According to FAO, these trends reflect not just changing dietary patterns and consumer preferences but also the failure of domestic production to keep pace with population growth in many countries.



ART

OF PULSE

TIMEKEEPING DEVICES HAVE BEEN USED THROUGHOUT HISTORY. THEIR TWO BASIC COMPONENTS? A CONSTANT, REPETITIVE PULSATION AND A WAY TO TRACK TIME'S ADVANCEMENT.

TIME

has been measured since mankind has felt the need to plan for the future, organize the day between chores, schedule prayers, guide ocean voyages or even just make sense of the passage of time. From sundials to mechanical watches, from pocket watches to wristwatches - or even a watch that can work as a phone - there have been multiples ways, throughout history, of keeping time - some more accurate than others - and that's what you will explore in the following pages. If the clock is one of the oldest human inventions in terms of devices, it's also a physical and commonplace object that can, in some instances, be considered as an "object d'art" and have a very specific iconography and aesthetics.

There are clocks and watches that have become reference points, as instruments that transcend their function as timekeeping devices and move towards a timeless domain. Within these pages, we'll also undertake a visual exploration that focuses on iconic and famous timepieces within the pop culture firmament. The instances culled include monuments that mark a city's landscape, watches that became game changers within the industry but also famous illustrations, art installations and paintings, without neglecting examples sported by film heroes, to some very real-life icons. These are the devices that make timekeeping an art.



© DEA / G. NIMATTALAH / De Agostini / Getty Images

WATER CLOCK

The water clock is the first instance of a device designed to keep time that does not depend on celestial objects. Time was measured by the regulated (one hour) flow of liquid in and out of a vessel. Curiously, the famous Greek philosopher Plato invented the first alarm clock as he was developing a water clock.

INCENSE CLOCK

This is a Chinese maze incense clock. In the Far East, burning incense was often used as a timekeeper, and Chinese texts refer to periods of time as the time it takes to burn an incense stick. The length of incense sticks was standardized and the perfumes which could be incorporated within them enabled the user to keep time simply by means of their sense of smell.



© SSPL / Getty Images



HOURLGLASS

Although the origin of the hourglass (or sand clock) is unclear, it was definitely used in Medieval ships as did the Portuguese explorer Ferdinand Magellan. It is comprised of two glass bulbs connected vertically by a slim neck that allows a measured drip of material (usually sand) from the upper bulb to the lower one.



© Wikipedia

CANDLE CLOCK

In the 9th century, King Alfred the Great of England (849-899) had a candle clock that consisted of six candles that were 12 inches high and made from 72 pennyweights of wax. Each candle was able to burn for four hours and the whole set of six lasted 24h.

SHADOW CLOCK OR SUNDIAL



© Fine Art Images / Heritage Images / Getty Images

A sundial, or shadow clock, is the earliest timekeeping device by relying on the sun (and its apparent position in the sky) to represent the passage of time. Although quite precise, these are useless at night or on overcast days. The Metropolitan Cathedral Basilica of Saint Catherine of Alexandria (1577-1622), located in Cartagena, Colombia, possesses a wall mounted sundial plate that is very accurate in terms of timekeeping.

THE HOUR

The Egyptians divided both day and night into 12 hours each (there was an earlier division into 10 hours of daytime that accounted for two hours of twilight or half-light). This time measurement was adopted by the Hellenistic Greeks and Romans whose astronomers divided the natural day into 24 equinoctial (so called because equal) hours. Once equal became commonly used, the more convenient approach was to count them from midnight.



© SSPL / Getty Images

A clock with special machinery and dials in order to display, as the name suggests, astronomical information such as the position of the sun, moon, constellations or planets, in relative term. The European models, which derived from the Greek 2nd century BC Antikythera Mechanism, emerged by 1300 and became popular in the 18th century. In Gdansk, Poland, the St. Mary's Church has an astronomical clock from the 15th century. It was the largest at the time and might still be the largest wooden one.

ASTRONOMICAL CLOCK



© Wikipedia

ATOMIC CLOCK

New time standard is set by atomic watches, which uses the caesium atom to measure time. In 1967, it was formally recognized as the new international unit of time by the National Institute of Standards and Technology (NIST). 1 second equals 9,192,631,770 oscillations of the caesium atom's resonate frequency.

QUARTZ WATCH

In the 1930s, quartz crystal and its electric abilities created the most accurate watch yet due to the crystal oscillator generating a signal with an extremely precise frequency. The first one was built in 1927 by Warren Morrison and J.W. Horton, employees at Bell Telephone Laboratories.



© Vwee / Shutterstock

THE MINUTE AND THE SECOND

Created by the Sumerians, the Sexagesimal system, based around the number 60, was used for astronomical calculations due to its multiple possibilities of division without incurring in fractions (by 2, 3, 4, 5, 6 and 10), providing the basis for counting minutes and seconds. This system is used to measure time, but also angles and geographical coordinates.

POCKET WATCH



© Wakiba / Getty Images

The first pocket watch (a portable watch) was invented by a German locksmith, Peter Henlein (1485-1542). Later, it was added a balance ring, which regulated it like a pendulum – this invention belongs to pendulum clock builder Christiaan Huygens (1629-1695). This made them accurate within 5 minutes per day, revolutionizing the watch-making industry.

WRIST WATCH

In 1904, a Brazilian aviator asked famed French watchmaker Louis Cartier to build him a wristwatch. Cartier obliged. Later, during World War I, aviators and soldiers were the first to wear wristwatches due to its usefulness, which dramatically changed public perception regarding their usage, opening up a mass market in the postwar era.



© Fine Art Images / Heritage Images / Getty Images



© DeAgostini / Getty Images

MECHANICAL CLOCKS

Pope Sylvester II (946 AD – 1003) is presumed to have built the first mechanical clock in the 11th century. Further along, Galileo Galilei (1564-1642) contributed to their evolution with his investigation of the pendulum, which was used to regulate mechanical clocks, rendering them more accurate.



© DeAgostini / Getty Images

AUTOMATON CLOCK

Also known as an automata clock, this kind noticeably strikes, or chimes, the hours and features automatons, i.e., self-operating mechanisms that automatically follow a programmed sequence of operations. They were built from the first century BC up until Victorian times. Angels, saints, royalty or famous composers are usual imagery present in these types of clocks.



© Fabio / Getty Images

Prague astronomical clock

This medieval astronomical clock is located in the Old Town Square in Prague, Czech Republic, and was first installed in 1410. It is the oldest astronomical clock still operating.

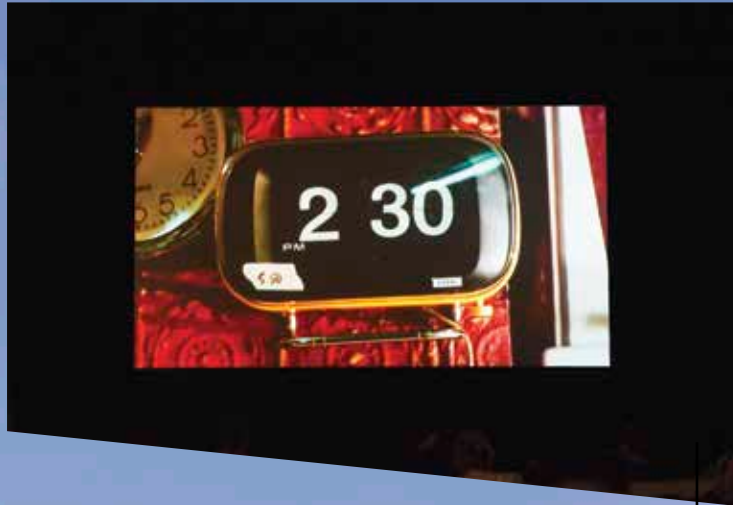
SOME OF THE MOST ICONIC WATCHES AND CLOCKS IN HISTORY

“The Persistence of Memory” Salvador Dali

Currently located at the Museum of Modern Art, in New York, (since the year 1934, three years after it was first created), this surrealist painting is one of the most recognizable art works by Spanish artist Salvador Dali.



© Bettmann / Getty Images



© Marco Secchi / Getty Images

“The Clock” by Christian Marclay

This video art installation by American-Swiss artist Christian Marclay that functions as a looped 24-hour long montage of scenes from cinema and television history includes real-time references to the time of day.

Central Station

The Grand Central Terminal is the United States of America's most iconic and beautiful train station. It is a commuter, rapid transit railroad terminal located at 42nd Street and Park Avenue, in Midtown Manhattan in New York City.



© Pola Damante via Getty Images



© The Print Collector / Print Collector / Getty Images

“Alice in Wonderland”

‘Too Late said The Rabbit’, 1930. The White Rabbit from Lewis Carroll's (1832-1898) “Alice in Wonderland”. After an illustration by John Tenniel (1820-1914) colour printed by Edward Evans (1826-1905). From the ‘Alice in Wonderland’ series of cigarette cards produced by Carreras Limited, 1930.



© Miramax

“Pulp Fiction”

This 1994 American film, written and directed by Quentin Tarantino, mixes the neo-noir crime genre with black comedy. This still belongs to the segment “The Gold Watch” with Christopher Walken.



Big Ben

The Great Bell of the clock tower at the north end of the Palace of Westminster, in London, UK, is named Elizabeth Tower but nicknamed Big Ben. It was completed in 1855.

© Spaces Images

WATCH MAKING

@Casa Pia

*Unique in the Iberian
Peninsula, it first began
over 120 years ago*

Clock developed by one of the students
of the final year, as the final project for Casa
Pia's watchmaking course

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DELIGHTFUL WATCHMAKING COURSE



Hoop, swing, spiral, anchor, plateau: these are some of the tiny pieces that make up mechanical watches.

WHEN you look at a mechanical watch it's hard to imagine that, inside it, there is a highly complex and organised world. A world made up of minuscule pieces, some of them so tiny they are hard to see with the naked eye. A world where the technical terms – bezel, balance, hairspring, pallet, plate – are utterly incomprehensible to most of us. A world where mechanics merge with physics, sculpture and design. It has been said that mechanical and old watchmaking have a similar relationship to general watchmaking as opera does to music. While this comparison does not explain everything, it certainly helps to shed some light on the matter. Unique not only in Portugal but in the Iberian Peninsula, the Casa Pia's professional watchmaking course

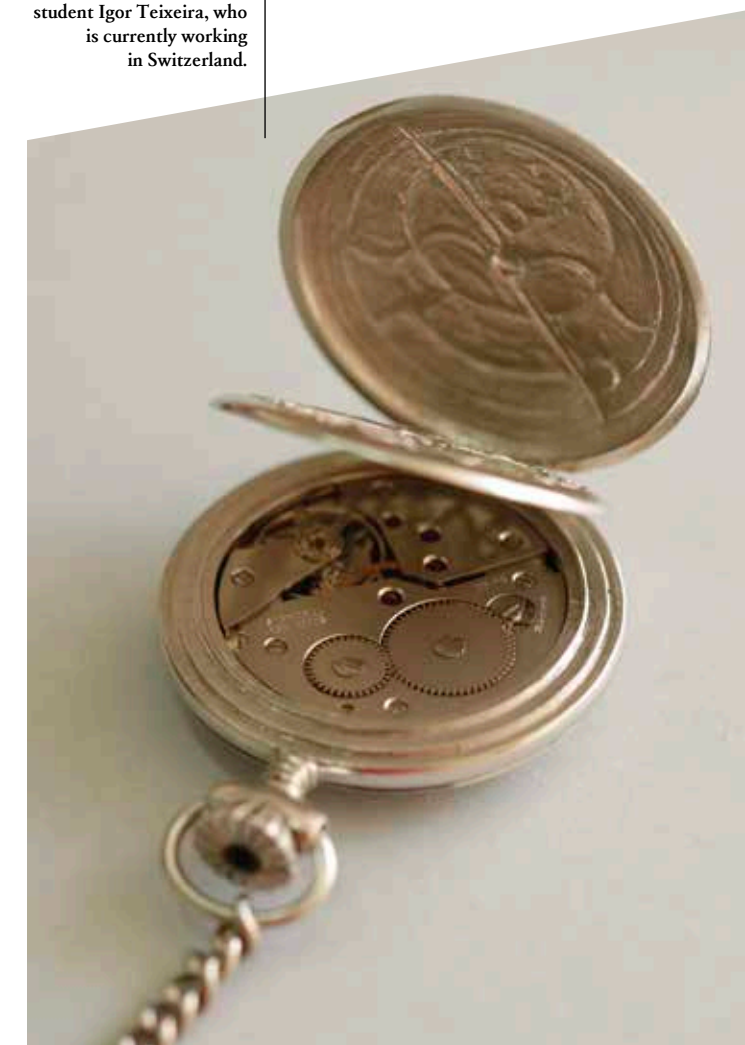
first began over 120 years ago, in 1894. At that time it was held in a mansion house rented by the school in Lapa, Lisbon. "There being no watch manufacturing in the country and with an initial undertaking promoted by the Marquis of Pombal having been short-lived, it was the Casa Pia, in 1894, that took on the task of teaching this very interesting skill," says a document from the time. Today, the course is known for the rigour and discipline demanded from its students – reflected in the considerable competence and highly-refined skills they have acquired by the time they leave the school – and for the comprehensive range of taught subjects. These include Portuguese, mathematics, physics and chemistry, in addition to other more specific subjects such as watchmaking technology,

practical workshops in watchmaking and technical drawing for watchmaking. Another distinguishing factor of the course, which helps to explain why young people with no previous connection whatsoever to watchmaking choose to take it, is its 100% employability rate.

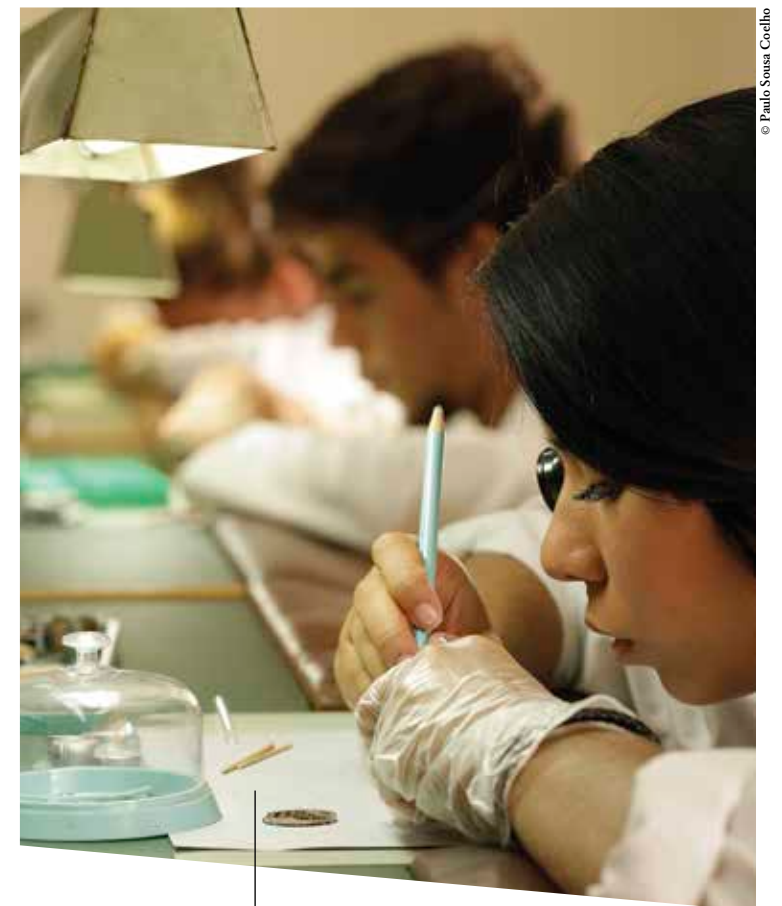
A THREE-YEAR-LONG COURSE

With both his brother and his mother already being connected to the world of watchmaking, 16-year-old Pedro Madruga has always believed that this is where his future will lie. Not because he felt any obligation to follow in an established family tradition but simply because he grew up surrounded by stories around watches and mechanisms, which to a certain extent fired his passion for the craft. "I was influenced by my family," admits Pedro, one of the 10 students currently in the second year of the Casa Pia's watchmaking course. A year away from completing his training, Pedro says, "I really want to keep doing this". What he enjoys the most, he says, is "poking about in watches" and trying to understand their mechanisms. On the contrary, 19-year-old Marta Oliveira never imagined herself working with watches, either in terms of study or as a profession. In fact, it took her several months to start enjoying the course.

Clock developed by former student Igor Teixeira, who is currently working in Switzerland.



feed.jeronimomartins.com



Marta Oliveira is now in her final year of the course. She intends to stay in Portugal and work in the business for at least two years. Then she will head for Switzerland.

However, by the end of her first year, during which students develop their psychomotor and fine motor skills - by making and handling the tools they will use during the remainder of the course - all her doubts had vanished: she loved what she was doing and, whatever it took, she would make her way in the world of watchmaking. Marta Oliveira is now in the final year of the course. Despite the fact that this third and final year began only recently, she has already made firm plans. She intends to stay in Portugal and work in the business for at least two years. Then, having gained experience, she will head for Switzerland where she hopes to follow the footsteps of many former students and work for one of the country's many luxury watch manufacturers. While she talks, Marta never takes her eyes off the tiny piece she is working on. It is the hairspring of a watch that belonged to her uncle, and previously to her great-grandfather, and which she brought with her to class today. Her aim in handling the tiny spring with such



Pedro Madruga

With both his brother and his mother already being connected to the world of watchmaking, Pedro Madruga admits he was influenced by his family.

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precision and care is to straighten it, or flatten it, to use the technical term. This is considered to be one of the most rigorous of the tasks involved in repairing mechanical watches.

In fact, one of the biggest challenges students in the Casa Pia's watchmaking course have to face is the ability to maintain their focus for long periods of time. That and being very, very patient. "You have to really like this. Some people cannot manage to stand still and stare at the innards of a watch for two hours, trying to work out where the problems are," says Pedro Madruga. Marta Oliveira agrees: "It's a very demanding course. You have to have a lot of patience."

AN ETERNAL ART

Former Casa Pia student Alexandre Ribeiro, who started at this school when he was four, says that what he valued the most in the watchmaking course was its highly demanding and disciplined nature. "There were rules and you had to obey them. There was a great spirit of learning, with lots of masters all looking out for us," says Alexandre, explaining that it was precisely this "strong sense of responsibility" that led him to becoming manager of a watch shop at the age of eighteen. "You are really well-qualified when you finish the course."



© Paulo Sousa Coelho

Students and former students share the same view: to be successful in this course it requires "a lot of patience, discipline and rigor".



© Paulo Sousa Coelho

Being patient

One of the biggest challenges facing students on the Casa Pia's watchmaking course is the ability to maintain their focus for long periods of time.



© Paulo Sousa Coelho

Currently, Alexandre manages the Torres Joalheiros shop in the Avenida da Liberdade, a family-run enterprise which has been in business for more than a century. The shop, one of six that the company runs in Lisbon and Cascais, features the most extensive range of fine timepieces and jewellery in the Portuguese capital, with customised sections dedicated to leading brands such as Rolex, Chopard and Jaeger-LeCoultre.

Asked about the main challenges ahead of the mechanical watch business in these days of increasing demand for so-called smart watches, Alexandre says that it is important for watchmaking to remain true to itself: a long-standing and well-established art that requires knowledge in various fields and which produces some of the finest artistic objects that, unlike electronic watches, can be truly "eternal".

It was "love at first sight," says Igor Pereira, he too a former Casa Pia student, describing his feelings when he started the course. "The school, its resources, the planning, the first contact with watches... For me, it ticked all the boxes." He has many memories of the time he spent at the school. He remembers "the master watchmakers who shared their expertise and the classmates I used to laugh with." Currently working in Switzerland for one of the world's most-highly acclaimed brands, Igor says that because the course "is so demanding and includes both practical classes and theory, every one of its students is well-placed to enter the world of professional watchmaking. So much so that the course is on a par with any similar type of training offered in Switzerland." ●

Casa Pia's watchmaking course is notable for its 100% employability rate.

"You are really well-qualified when you finish the course"



© Cofido Casa Medeiros e Almeida

MEDEIROS E ALMEIDA COLLECTION

POCKET WATCH

On display in the house where he lived and which he turned into a house-museum in 1972, the collection belonging to António de Medeiros e Almeida (1895-1986) brings together Portuguese and international works of art in the fields of furnishing, painting, sculpture, textiles, goldsmithery, ceramics and sacred art, dating from between the second century BC and the 20th century. A particular highlight of the collection is the pocket watch designed by the prestigious watchmaker Breguet. It was commissioned by General Junot, who led the first French invasion of Portugal. When the General committed suicide in 1813, the watch was returned to the House of Breguet and was later offered to General Arthur Wellesley, first Duke of Wellington.

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WRIST VINTAGE WATCH



At the end of 1930, two Portuguese merchants – Mr. Rodrigues and António Teixeira, went to IWC's head office in Schaffhausen, in Switzerland. The International Watch Company, renowned at that time as an expert in manufacturing pocket watches, received an unusual request from the visitors: to create a wristwatch with the precision of a maritime chronometer. The “Portugieser” emerged as a completely different watch from the style of the era, with a larger diameter than the emblematic models and not many were sold. Nevertheless, it was that difference that led the company's team to re-launch the model at the beginning of the 1990s, making it the forerunner of a new trend that still persists. Nowadays it is one of IWC's most emblematic watches and a pinnacle of Fine Watchmaking. In 2010, IWC introduced the “Portugieser Grande Complication and Minute Repeater” with fine watchmaking functions, including a perpetual calendar until 2499. On the back, a sextant marks the history of the “Portugieser”, a large wristwatch with the precision of a Maritime Chronometer.

www.iwc.com/en/

THE ART OF COWBELLS RECOGNIZED BY UNESCO

Dating back more than 2,000 years, the art of cowbells manufacturing in Portugal earned the title of Intangible Cultural Heritage in Need of Urgent Safeguarding, awarded in December 2015 by UNESCO – the United Nations Educational, Scientific and Cultural Organization. The handmade manufacture of cowbells, metal instruments that produce a characteristic sound and whose function is to help locate livestock in pastures, attains its highest expression nationwide in the Alentejo region, in the municipalities of Estremoz, Reguengos de Monsaraz and Viana do Alentejo. It is in danger of extinction, as producers increasingly rely on other, more advanced mechanisms to perform the same function.

www.chocalhospardalinho.com/en/



SETTING THE RHYTHM WITH THE TIPLE

The Tiple is a Colombian string instrument declared as National Cultural Heritage by the Congress for its immense value for the local folklore. It is a small guitar, about three-quarters the size of a classical guitar and descended from guitars brought by the Spanish during the conquest of America. It is an essential part of Colombia's rural heritage because of its cheerful tunes that evoke the peasant culture. Since 1940 in the municipality of Velez, Santander every August took place “The Tiple and Guabina Festival”, where is celebrated the musical genre played with the Tiple.

www.guitarrasandalucia.com.co



GO FOR SHOPPING
DELIGHTFUL

HARPY EAGLE: SPEED AND STABILITY

Considered the most renowned surfboard brand in the country, Polen Surfboards was founded in 1988 with the aim of creating the best surfboards in Europe. Focused on innovation and improvement, Polen, which has Nuno Cardoso as a resident shaper, manufactures boards for both professionals and amateurs. One of the brand's most recent models is the Harpy Eagle, a board used by former World Surf League surfer Pedro Henrique, who actually helped to develop it. Combining speed and stability, it's perfect for those who like to risk extreme manoeuvres and set their pulses racing. And in Portugal there is no shortage of waves for that.

www.polensurf.com



© Mauro Morry / Polen Surfboards

HOUD SOUND

Houd is a brand that was born of the collaboration between David Sandoval and Gustavo Huertas. In 2012 they began working on ideas for design home speakers and other accessories, analyzing the market and defining concepts. Their approach is concerned with creating poetic objects that tell something to those who observe them, creating something special with their designs so as to make every room and environment an enjoyable place to be. Their production is focused on speakers with beautiful design and quality materials. The Houd acoustic speaker is basically a wooden dock that amplifies your device's tiny internal speaker and the amplification effect is amazing. These acoustic wood speaker works by channeling the sound from an iPhone or iPad's built-in speaker through resonant wood channels to create a naturally amplified sound. Made with the best wood by hand, one at a time, by skilled artisans.

www.houdsound.com



© Press Materials - Houd

CARDIO BUNNY

This thoroughly unique brand positions itself in the Polish market as a combination of innovative sports clothing that support the burning of fat tissues during workout, as well as fashionable design and femininity. The real distinguishing factor is the ITOFINISH KELP system, which originates from a natural product, containing *gingko*, *sea algae* and *gotu kola*, among other components. This "clothing elixir" is enclosed in microcapsules that are then released into the skin during motion for superior comfort during exercise. The Autumn collection, named Majesty, was inspired by butterflies as symbols of beauty, force and power.

www.cardiobunny.com



© Press Materials - CardioBunny



© Press Materials - Pablo Music

PABLO MUSIC

They can conjure up a storm, the delicate humming of trees or even a heartbeat – the instruments we speak of are drums, specifically those made by one of the most famous beat-producing Polish brands, Pablo Music. For over 20 years they have produced *djembe* and *conga drums*, while recently introducing *dun duns* and *kalimbas* into their offer. Their products are made of top quality materials and attention to detail, providing a warm and soft sound – that will certainly delight all.

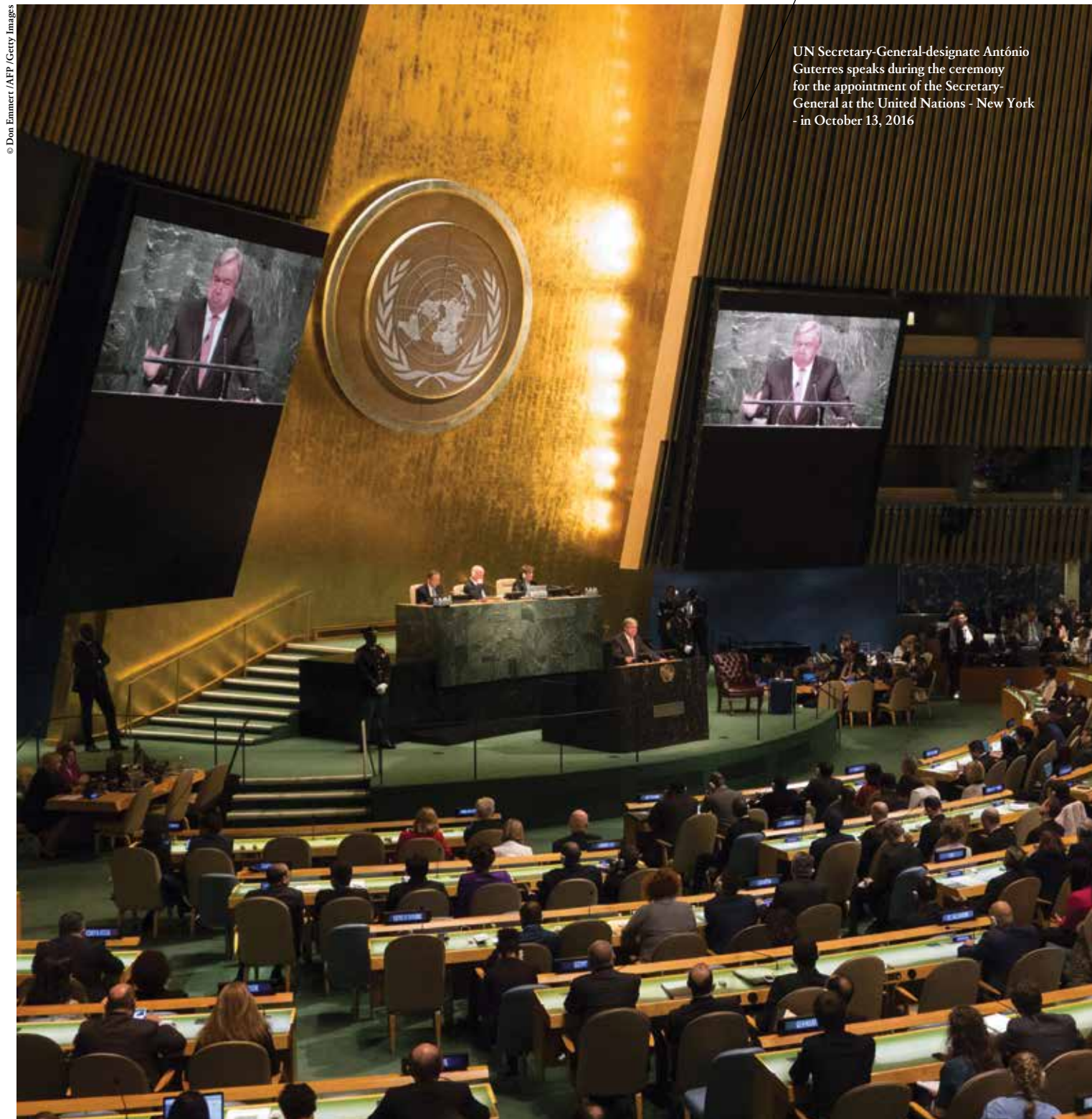
www.pablomusic.pl

ANTÓNIO GUTERRES

**“A STRONG
IMPULSE TO DO
SOMETHING”**

*The former Portuguese
prime minister is the new
UN Secretary-General.
What should the world
expect from him?*





UN Secretary-General-designate António Guterres speaks during the ceremony for the appointment of the Secretary-General at the United Nations - New York - in October 13, 2016

A HUMBLE APPROACH

ANTÓNIO

Guterres replaces Ban Ki-moon and takes the UN office on January 1, 2017. Among his top priorities are the civil conflict in Syria which has lasted for almost six years resulting in the death, so far, of 300,000 to 470,000 people, according to the United Nations' figures, and the refugee crisis. "Having worked with the most vulnerable populations in the world, those who have been the most victimized by all these conflicts, it is inevitable to feel a strong impulse to do something, not only to help refugees, but above all to prevent refugees. And this has to do with diplomacy for peace", Guterres said shortly after his acclamation. "Great progress has been made on sustainable development and its goals, great progress has been made on the Paris Agreement (...). But if anything the international community has failed, it has been about peace and security", added the new UN Secretary-General. The fight for gender equality will also be one of its priorities. "I have long been aware of the struggle that women face at work only because they are women, the violence they are exposed to during conflicts only for being women", said Guterres, pledging to continue his work in this area. "This remains my commitment."

António Guterres was pronounced UN Secretary-General by acclamation on October 6. In his first official statement following the decision by the Security Council, the former Portuguese prime minister said he only had two words to describe what he was feeling: "Gratitude and humility". "I must say that I am fully aware of the challenges the UN faces, the dramatic problems of today's complex world can only inspire a humble approach", Guterres said, adding that "the real winner is the dignity of the United Nations".

Federica Mogherini, the High Representative of the European Union (EU) for Foreign Affairs and Security Policy, congratulated Guterres for being indicated as the favourite for the position of Secretary-General of the United Nations Organization (UNO), describing him "as a good friend, man of vision, heart and action". "He is a pride for Europe", wrote Martin Schulz, president of the European Parliament, on his Twitter account. Louis Charbonneau, the United Nations director at Human Rights Watch, said that By choosing him as the new Secretary-General, the Security Council "chose a defender of refugees with the potential to strike a radically new tone on human rights at a time of great challenges". In the run for leadership, Marcelo Rebelo de Sousa, President of the Portuguese Republic, named him as "the best of us all". "His entire candidacy, right from the very moment it was launched, was based around a firm declaration of his independence, his integrity, his capacity for dialogue and for building bridges, as well as a strong view of the multilateralism and irreplaceable role of the United Nations in regulating a globalised world", wrote Jorge Sampaio, former President of the Republic.

Left behind was the long and slow process for assessing the candidates for the position, who were subject to a total of six straw polls. The last one took place the day before the acclamation of Guterres as the new Secretary-General and it was known, for the first time, the way the five permanent members of the UN Security Council were to vote: China, United States, France, Russia and United Kingdom. Guterres won with 13 votes in favour, two abstentions and no veto. "Today we have a clear favourite and his name is António Guterres", Vitaly Churkin, Russian ambassador

"I am fully aware of the challenges the UN faces, the dramatic problems of today's complex world can only inspire a humble approach"

at the United Nations then said. Guterres was finally reaching the position he had always aspired to, say those who know him well.

TAKING THE BARE-FOOT SIDE FROM THE VERY START

António Manuel de Oliveira Guterres was born in 1949, in the civil parish of Santos-o-Velho, in Lisbon, during times "of poverty, with people in difficulties and bare-foot". That "very strong, very tough" reality, would contribute "decisively" towards him later working "in politics and having socialist ideas", he remembered in an interview in 2002. He started off by getting involved in movements doing social work linked to the Church. He majored in Electrical Engineering from the Instituto Superior Técnico in Lisbon, having made his mark as a brilliant student. He was an activist with the Juventude Universitária Católica - Catholic University Students Organisation - president of the Centro de Ação Social Universitário, an association responsible for social development projects in underprivileged neighbourhoods in Lisbon, during the 1970s; he attended training sessions and retreats of Opus Dei and Mocidade Portuguesa - Portuguese Youth Organisation-; he was a member of the Grupo da Luz - a forum where people reflected on the Council and on the social and political life in the country - and he founded DECO, Associação Portuguesa para a Defesa do Consumidor (Portuguese Consumer Rights Association).

“He is always fighting the good fight and cares for the people. He’s very effective and a strong leader”

Angeline Jolie, Special Envoy for the United Nations High Commissioner for Refugees (UNHCR), on Guterres

THE ROAD TO BECOMING PORTUGAL’S PRIME MINISTER

In 1973 he joined the Socialist Party (PS). His rise within the PS would begin in 1991, when Aníbal Cavaco Silva, former leader of the Social Democrat Party (PPD/PSD), won the general elections by an absolute majority, with a result that is still today the best ever by the social democrats. “These results leave me in a state of shock”, António Guterres said at that time.

The next year, he was elected Secretary-General of the PS and began his path to Government, winning the elections in 1995. In 1999, after standing out internationally because of the battle for a referendum for the independence of East Timor and having founded the Portuguese Council for Refugees, António Guterres was invited to be president of the European Commission, but he declined. In “António Guterres - Os Segredos do Poder” (“The Secrets of Power”), Adelino Cunha, the author of the biography published in 2003, writes that the former Portuguese prime minister declined the invitation due to the death of his first wife, Luísa Guterres, the mother of his two children. Years later he would confess: “If there is one thing that was really difficult for me to refuse, it was the European Commission”. In 1999, he was invited to take up office as president of the Socialist International, a worldwide organisation of social democrat parties, a position he would maintain until 2005.

In October of that year, he won the general elections once again and that’s when things started to get a little complicated. Leading without an absolute majority in Parliament, Guterres had his hands tied at such crucial times as those that always precede the approval of the State Budget. Those were very debilitating times for him. After a little over two years, he decided to step down from office. The justification that he presented for his resignation became notorious: “I am resigning to prevent the country from falling into a political swamp”. Guterres’ years in power coincided with some of the country’s highest growth rates. In 1998, the year of Expo - the world fair which took place in Lisbon, under the theme “The Oceans, a Heritage for the Future”, paying homage to the 500 years’ anniversary of the Portuguese discoveries -, the growth in GDP was close to 5%. Portugal had never lived such golden years.

PAVING THE WAY FOR THE INTERNATIONAL SPOTLIGHT

António Guterres was increasingly occupying a prominent position on the international circuit. As president of the European Council in 2000, he promoted the adoption of the so-called “Lisbon Agenda”, a strategic development plan for the European Union, he co-chaired the first summit between the European Union and Africa, in Cairo, and later, the Committee for Development.

In 2005, when he was still working as a consultant at Caixa Geral de Depósitos, a Portuguese state-owned bank, he decided to apply for the position of United Nations High Commissioner (UNHCR). Competing with seven strong rivals, including the former French minister and renowned intellectual Bernard Kouchner, the former Italian commissioner Ema Bonino, and the Tunisian Kamel Morjane, deputy high commissioner for Refugees, Guterres was chosen by a committee of experts, succeeding Rudd Lubbers from the Netherlands in that office. When starting at the UNHCR, he said he was joining the agency with conviction, humility and enthusiasm. “Conviction because I truly believe in the core values of this office and I want to struggle to make them prevail all over the world. Humility because I have a lot to learn and will be depending on all of you for that. Enthusiasm because I would not be able to choose a more noble cause to fight for”.

According to his official biography, for the ten years in which he was the head of the agency, the former Portuguese prime minister promoted strong structural reform within the organisation: he increased the effectiveness and capacity of the organisation’s emergency response. His term was marked by some of the biggest and most severe crises of refugees and displaced persons of the last decades, such as those resulting from the conflicts in Syria, Iraq, South Sudan, Central African Republic and Yemen.

In January this year, Guterres confirmed his willingness to be a candidate for the office of UN Secretary-General and said: “I had the huge privilege of accumulating a series of experiences, I lived through a revolution in Portugal, I was at the forefront of the democracy consolidation process, I was party leader and prime minister, I worked for ten years to support refugees, many doors were opened to me to everything that is vital in international relations. I have the duty of putting those abilities to work”.



Angelina Jolie and António Guterres arrive at a refugee camp in the Southeastern Turkish city of Kilis, to meet Syrian refugees, on September 13, 2012

A SWIFT HISTORY OF BEANS

A portrait of Columbus at the court of Barcelona. In it, Christopher Columbus stands before the King and Queen of Spain, presenting Indians and treasures from the New World, in 1493.



IT is quite possible that the French are right and the haricot bean may have landed on the shores of the Gulf of Lion, in the Mediterranean sea, concealed between the historically famous Catherine de Medici's expensive pearls and delicate lace *vêtements*. This is a humorous version of the story of the traditional French cassoulet, which has its origins in Languedoc, a region in the south of France, and is made with goose fat, duck or lamb, and white beans. Although there are other versions of this story, this one is probably the most amusing. Brought from the New World by Christopher Columbus in 1528, the haricot beans arrived at Western tables after Pope Clement VII gifted them to the Italian priest Pietro Valerio, who out of botanical curiosity discovered its delicious flavor and its aphrodisiac properties. Gianbattista Barpo, author of the 16th century gastronomic volume "Le Delizie", argued that its consumption would enhance the male sexual performance. As Catherine de Medici packed for her trip to France, Valerio persuaded the Medici family to include a bag of these *fagioli* in the luggage, arguing that the way to a man's heart is through his stomach and, thus, the future princess tucked away these precious culinary novelties. ►



Bertie Bott's Every Flavour Bean
Introduced in "Harry Potter's" literary saga, these are the most popular sweets of the wizarding world. Similar to the commonly known jelly bean (a small bean-shaped candy made with sugar that presents soft shells and thick, jelly interiors), except when it comes to the flavors, as it does indeed encompass every flavor, including some weird and unexpected ones. The real-world inspired Bertie Bott's Beans, sold by Jelly Belly, have flavors Banana, Dirt, Grass, Apple, Lemon and many more.

Campbell's Soups
Campbell's Soups introduced Pork and Beans, a flavor specifically created so that workers could make use of their downtime while the soup simmered.



Beantown
In Boston, baked beans are prepared with a sauce that combines molasses and salt pork, a dish so popular that Boston has received the nickname "Beantown".

Andy Warhol's Black Bean
During the 1960s, Andy Warhol painted familiar, everyday consumer products (Coca-Cola bottles, Brillo boxes, etc.) using a screenprinting technique that simulated the mechanical effect of the source and multiplied it. His work explored notions of mass production, the value of art and its consumption, presenting these ordinary products as objects of contemplation.

Poland
An extremely popular dish in Poland, Breton Beans (*Fasolka po Bretonsku*) combines beans with bacon and sausages for an enjoyable, low-priced and substantial dish.

Mr. Bean
Mr. Bean is a very famous character, played by actor and comedian Rowan Atkinson, a juvenile idiot who amusingly complicates everyday tasks. While Mr. White was the first name to be thought of, Rowan Atkinson and Richard Curtis (the creators of the sitcom named after the character) played around with vegetables names, considering Mr. Cauliflower until they eventually settled on Mr. Bean.



"I ate his liver with some fava beans and a nice Chianti"

Hannibal Lecter in "Silence of the Lambs" (Jonathan Demme, 1991)

The Age of Discovery, led by the Portuguese, introduced new and exotic food to Europe.



Although beans have often been perceived as “poor man’s food”, we really should consider them as “every men’s food,” given their nutritional role in so many cultures, going as far back as the earliest Mexican and Peruvian cultures as well as Aztec and Inca peoples, proving its popularity and widespread intake throughout history, from ancient to present times. Beans were discovered in royal Egyptian tombs – there is a 2nd century BC fresco that shows lentil soup being consumed – and mentioned in Homer’s “Iliad”. Beans may even have been Europe’s salvation during the Middle Ages. As the Italian writer and academic Umberto Eco asserts, the cultivation and consumption of beans spread

through the continent and was able to return productivity to lands withered by war, effectively rescuing Europeans from potential malnutrition and possible extinction. Due to the European (nautical) expansion of the Age of Discovery in the 15th and 16th centuries, the continent was introduced to new and exotic foods from all over the globe, including the New World, and among them certainly were new specimens of beans. These nourishing New World pulses became a prevalent crop in Europe for their nutritional value and simple farming and storage. These advantages were also the reason why beans became a primary food source for sailors, which granted Navy bean its name.

This portrait by Marguerite-Louise Virginie (1792-1875) of Henry IV and Catherine de' Medici depicts them at the French court. In 1533, at the age of 14, Catherine had married Henry, second son of King Francis I and Queen Claude of France, becoming the Queen consort of France from 1547 to 1559.



© Fine Art Images / Heritage Images / Getty Images



© Amanda Hall / roberharding / Getty Images

Cloud Gate Sculpture
Cloud Gate, centerpiece of AT&T Plaza at Millennium Park in the Loop community area of Chicago, Illinois (USA), is a public sculpture by Indian-born British artist Anish Kapoor. Inspired by liquid mercury, it was built with the skyline in mind. Kapoor is not overly fond of the sculpture's nickname: The Bean.

THE POPULARIZATION OF THE BEAN

Despite their regal French introduction, beans have proliferated and soon became less of a delicacy although no less tasty. For a very long time, beans had a vital role in nutrition and due to their extensive cultivation they became, just like pop culture, massified. As a substantial substitute for meat, beans have routinely been used in times of adversity as an inexpensive source of protein – interestingly, beans are the only food item that, according to the (U.S. Department of Agriculture's) Food Guide Pyramid, fits both the vegetable and protein food groups. Due to their nutritional value and budget-conscious price tag, beans became a meal staple at such times as the Great Depression and World War II, when they were used in U.S. servicemen's rations around the world. The growing popularization of beans led to the growing popularity of a

brand that sold them canned and ready for consumption: Heinz Baked Beans, introduced in 1901. The brand became culturally embedded to the point when, between 1941 and 1948, their beans were classified, in the British Ministry of Food's wartime rationing system, as an “essential food” item. By virtue of having become so entrenched in consumers' awareness, Heinz Beans – whose ads have become classics in their own right – were featured in the prestigious American television series “Mad Men” (2007-2015), which highlights life, culture and advertising in the sixties. The notion of beans as a wholesome, familiar (in more ways than one) product that can also serve as a mouthwatering delicacy (as seen through Catherine de Medici's tale), serves to illustrate the reasons that explain the perseverance of beans as a staple in pop and food culture. ●



© Herbert Posing / Scott Polar Research Institute, University of Cambridge / Getty Images

A member of the team tucks into a tin of Heinz Baked Beans in the Ross Dependency, during Captain Robert Falcon Scott's Terra Nova Expedition to the Antarctic, January 1912.

PETE BETHUNE
CAPTAIN
OF THE
SEAS

The “eco-warrior” and conservationist Pete Bethune has one goal in life: to catch criminals who are endangering the world’s wildlife and environment and bring them to justice.



PETE BETHUNE

“So much of this planet is under enormous stress and there is a race against time to save it”



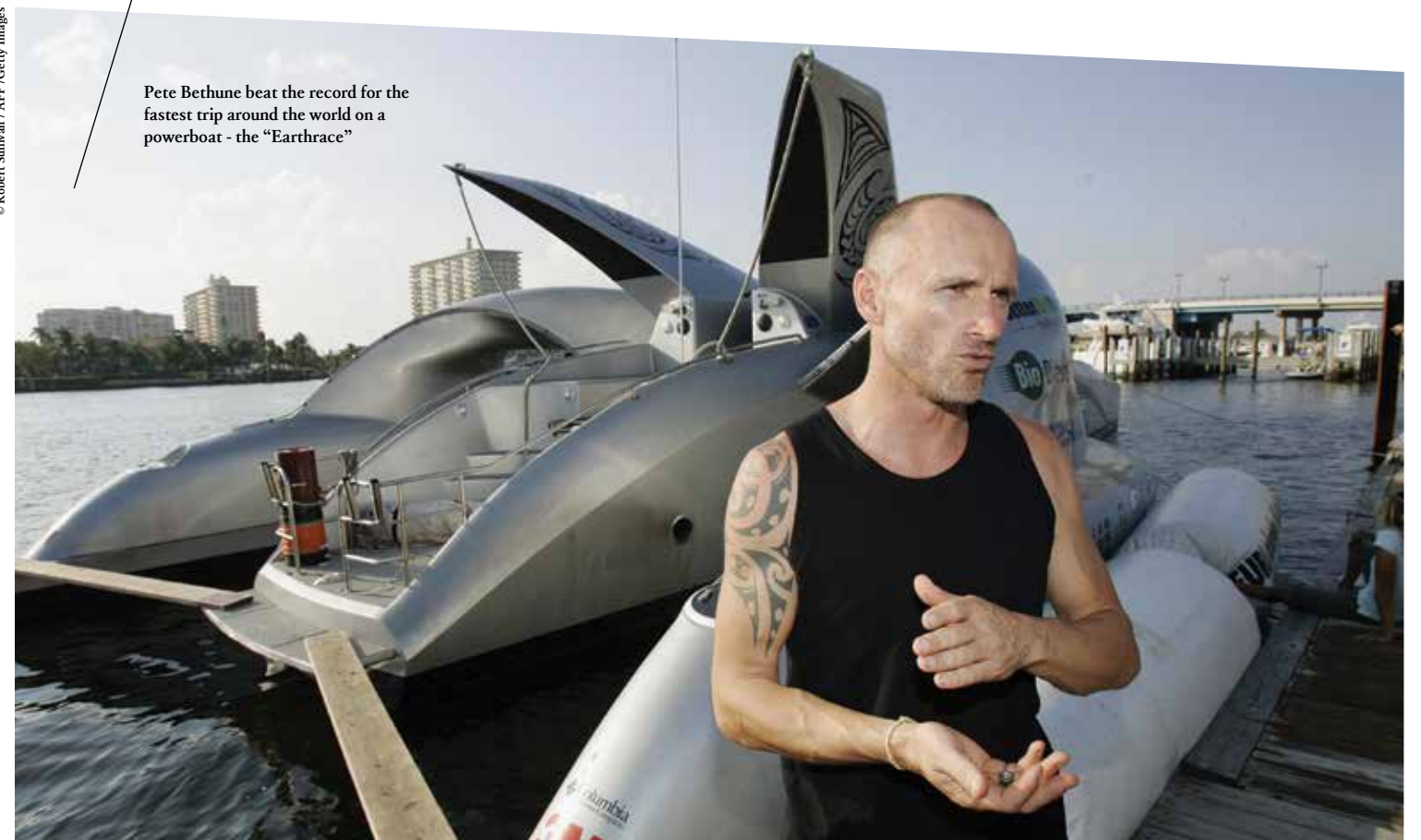
In 2010, as the captain of the “Ady Gil” - the vessel that is now known as “Earthrace” - Pete Bethune participated in anti-whaling activities as part of the Sea Shepherd Conservation Society. After a collision with an illegal Japanese whaling vessel, Pete Bethune was arrested and convicted for assault. These events only served to galvanize his resolve to enforce protection over aquatic wildlife. After his release from Japan and resignation from Sea Shepherd, the conservationist began building his own team, using his armed forces experience to work on Conservation Missions. This is how the nonprofit Earthrace Conservation was born. Bethune named his boat “Earthrace” - as well as his marine conservation organization - because he was racing this planet’s oceans and he believes that “we are on a race to save this planet, so much of this planet is under enormous stress, there is a race against time to save it and we all have a role to play in this”. Pete Bethune’s objectives are to balance human demand and protect biodiversity, while arresting criminals and bringing them to justice - he partners with government agencies and NGOs. This is what makes Pete Bethune’s heart beat faster and gets his pulse racing: “catching criminals on the oceans who are wrecking them”. He adds that he is a very lucky man because he gets to spend his life “catching people involved in illegal fishing and wildlife smuggling”. Bethune, and his conservation company, is equally invested in raising public awareness on illegal fishing practices in order to create a better and sustainable management of the sea. This is why he was the perfect invitee for Jerónimo Martins 5th Sustainable

Conference, in Lisbon, which, for one day, discussed the theme “Fishing for Sustainability”. These conferences aim to raise awareness among senior managers and strategic suppliers regarding Corporate Responsibility issues.

The New Zealander became captain of a worthy cause: apprehending illegal fishing vessels

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Pete Bethune beat the record for the fastest trip around the world on a powerboat - the “Earthrace”

MY PULSE RACES WHEN I CATCH CRIMINALS

What is the thing that really makes your heart beat faster?
The thing that makes my heart beat faster is catching criminals on the oceans, who are wrecking them, and I’m very lucky, I get to spend my life catching people involved in illegal fishing and wildlife smuggling. My pulse races when I get a chance to do that.

You named your state of the art ship and your organization “Earthrace” and you race the seas. Do you also believe that the Earth is on a race against the abuse of mankind?

We are on a race to save this planet. So much of this planet is under enormous stress and there is a race against time to save it, and we all have a role to play in this.

What is, in your view, the ultimate pulse of the Earth?
I’ve spent a lot of time lately in Africa. Africa has a pulse about it, and it’s really slow and it’s really weak. There’s many reasons for this: the wildlife is being pillaged, the fisheries are being pillaged, there is enormous population growth, there’s civil war and there’s AIDS. There’s always problems in Africa and its pulse is going very weak. We need to do something about it. The world has an obligation to help Africa out, we cannot just sit back and watch it deteriorate.

What is the maximum speed you’ve reached on water?
The maximum speed I’ve reached on water is actually not that fast, maybe 70 knots - 130 km/h - in a boat. I set a record for a powerboat to circle the globe and we refueled the boat on renewable bio-diesel fuel. The maximum speed we did was only 30 knots - 55 km/h. But it wasn’t about the maximum speed. We had to average a reasonable speed and get that boat around the world in one piece. It wasn’t so much about going really, really fast but we had to be reliable and get to the finish line. And that was what we did.

I imagine you have big rushes of adrenaline.

Before a mission we do get nervous. Sometimes I like to pretend that I’m a tough guy, but I’m not and I get really nervous on campaigns. You have a boat, you know you’re going out to board a Chinese vessel that is probably armed and your pulse just starts to race. There’s nothing you can do about it. In some ways, it’s a good thing: if you’re trying to board a vessel and those guys don’t want you on board, you need to be able to react and sometimes you need to stand up, and a high pulse is part of that. It takes a while to calm down.

How do you release tension?

I got two daughters back in New Zealand and I don’t see them a lot, but when I do, I make the most of it. I like being on the water, on boats, and surfing, and free diving, and scuba diving. Put me in the water, that’s probably my happy place.

FISHING FOR SUSTAINABILITY

@Jerónimo Martins

On November 17, the Jerónimo Martins Group gathered in Lisbon an audience of 200 people, from senior managers to business partners and suppliers, for one full day, to discuss the impact of the Group’s sourcing activity on biodiversity and life in the oceans. During this annual sustainability conference – “Fishing for Sustainability” - experts and experiences practitioners approached the role of the oceans and of fish in a context in which the growing global demand for fish is putting the aquatic life under pressure.

In the morning session, various panels and speakers highlighted the importance of the ocean’s ecosystem services and their economic relevance, sustainable fishing practices, the role of aquaculture in the Group’s strategy, the nutritional value of fish, as well as habits and trends of fish consumption on both Portugal and Poland.

In the afternoon, the focus was on the need for sustainable management of fish sourcing and the final presentation, under the theme “Fishing for Pirates”, was delivered by Captain Pete Bethune.



Pete Bethune witnessed, firsthand, the destruction of the oceans' ecosystems caused by illegal fishing

ILLEGAL FISHING TAKES ITS TOLL ON THE PLANET

Oceans don't just cover over 70% of the Earth's area, they are also the planet's largest habitat, where an immense diversity of species inhabits. Aquatic species aren't the only ones that depend on the ocean's resources, human beings do too, specifically when it comes to oxygen and food – fish alone accounts for 17% of all animal protein consumption around the world. Additionally, the planet's oceans are also sources of economic development – not to mention of employment of millions of people around the world – given that much of it derives from the commerce and trade of fish which, in turn, generates over 250 billion dollars per year. The demand created by this economic development leads to unbalanced

human activity that threatens the sustainability of the oceans, especially where biodiversity is concerned. Current demand is such that it doesn't allow enough time for the natural regeneration of fish stocks. Contributing factors are: large scale fishing gear, greenhouse emissions, and waste disposal streams. This leads to a rather negative, long-term impact on the ecosystems of the oceans.

The answers, in order to address these impacts, rest on more responsible harvesting and the use of less invasive and more selective equipment. Moreover, there is a need to foster sustainably managed fisheries, while reducing the pressure put upon threatened species.



A pilot whale is loaded to the deck at Taiji Port on May 2, 2013 in Taiji, Wakayama, Japan. This is the only country in the world still conducting "scientific whaling".

Feed.

JERONIMO MARTINS WORLD'S MAGAZINE

SLOW FOOD



What is the key role played by peas, beans, lentils and chickpeas in fighting malnutrition? In the International Year of Pulses, a nutritionist, a horticulture expert and an actress digested this question over a meal.

SLOW FOOD

A journey about food, economy, humans and life.

Our guests discussed how pulses can contribute towards mitigating and adapting to climate change



TAKING THE PULSE TO SUSTAINABILITY

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THE UNITED

Nations Organization put the topic of pulses on the world agenda in 2016, as being of vital importance to humanity, at a time in which the rampant growth in the world population is putting pressure on food with proteins of animal origin. The actress Anabela Teixeira was chosen by the FAO - Food and Agriculture Organization of the United Nations Organization, to be the ambassador of this initiative in Portugal. Feed invited her to moderate a talk about the importance of pulses with Susana Pasadas, nutritionist at the Jerónimo Martins Group's, and António Monteiro, professor at the Instituto Superior de Agronomia (Higher Institute of Agronomy) of the University of Lisbon. Seated at a table in the restaurant Open Brasserie Mediterrânica, at Inspira Santa Marta Hotel, in Lisbon, the three guests discussed how pulses can contribute towards mitigating and adapting to climate change, as well as towards food safety and soil fertilisation.

ANTÓNIO MONTEIRO



PROFESSOR AT THE INSTITUTO SUPERIOR DE AGRONOMIA (ISA), SCHOOL OF AGRICULTURE AT THE UNIVERSITY OF LISBON. HE HAS BEEN RESEARCHING IN THE FIELD OF HORTICULTURE, TEACHING ABOUT PRODUCTION AND DIVERSITY, USE AND CONSERVATION OF VEGETABLES, WITHIN THE SCOPE OF THE MASTER IN GASTRONOMIC SCIENCES.

ANABELA TEIXEIRA

PORTUGUESE ACTRESS THAT STARRED IN SEVERAL MOVIES, TELEVISION SERIES, SOAP OPERAS AND SHORT FILMS. SHE WAS CHOSEN BY THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS ORGANIZATION IN PORTUGAL AS AMBASSADOR OF THE 2016 INTERNATIONAL YEAR OF PULSES.



SUSANA PASADAS



COORDINATOR OF THE NUTRITION TEAM OF THE JERÓNIMO MARTINS GROUP'S QUALITY AND PRIVATE BRAND DEVELOPMENT DEPARTMENT. SHE IS RESPONSIBLE FOR NEW FOOD PRODUCTS DEVELOPMENT AND NUTRITIONAL INFORMATION VALIDATION. SHE IS ALSO INVOLVED IN AWARENESS AND PROMOTION CAMPAIGNS REGARDING HEALTHY EATING.





STARTER EACH CLIMATE HAS ITS OWN PULSE

CROWNED

scallops with mashed peas, crispy green beans and smoked black pork was the starter chosen by Chef João Silva to trigger the conversation. Susana Pasadas started by saying that “people don’t include enough of what we call food of high nutritional value in their meals, because they forget or simply because they don’t want to”, warning that “people will eat in quantity rather than in quality”. That’s where pulses come in. Pulses are highly nutritious, not only because its high content of protein - which is the equivalent of around 20 to 25% of their weight - but also because they are rich in vitamins and minerals, and are an essential part of our diet, the nutritionist explains. They are equally important in the fight against hunger, António Monteiro adds, because “there is such a huge variety of pulses, it’s possible to find the right pulse for any climate.” This means that “populations nowadays can locally produce their diet, contrary to what happened before, when people tried to take rice and cereals from one continent to another”, the professor says. “If we want to reinforce the local diet with pulses, we must select those which best adapt to a certain crop system and to certain soil and climate conditions”.

CROWNED SCALLOPS WITH MASHED PEAS, CRISPY GREEN BEANS AND SMOKED PORK

It is said that peas are among the Earth’s oldest vegetables. The oldest pea ever found was nearly 3,000 years old and discovered on the border of Myanmar and Thailand. Their cultivation became widespread so early in history that it is uncertain where peas came from; although the most likely places of origin are China, the Middle East, Sri Lanka, Malta or Italy.

“We can partly replace animal protein and we can enrich our diet with certain minerals, if we include pulses”

SUSANA PASADAS



MAIN COURSE CAN PULSES INCREASE THE FERTILITY OF THE SOIL?



© Paulo Sousa Coelho



LAMB RAVIOLI SERVED WITH ADZUKI BEANS

Adzuki beans are small, red beans that originated in East Asia and the Himalayan region and is commonly eaten in Japan, China, Korea, and other Asian nations, although it can be found in other parts of the world due to exportation. They are primarily red in color, but white, black, and mottled cultivars can also be found in certain areas.

ANTÓNIO

Monteiro, who has been working on research in the area of Horticulture, explains that the impact of pulses on the fertility of the soil is related to its ability to biologically fix nitrogen. "In a symbiosis with certain kinds of bacteria, such as the rhizobium kind - which settle in their roots - pulses can convert atmospheric nitrogen into nitrogenous compounds, which are used by the growing plants, thereby enriching the fertility of the soil". According to FAO, it is estimated that pulses are able to fix between 72 and 350 kg of nitrogen per hectare per year.

Pulses play an equally important part regarding climate change, as "the use of proteins of vegetable origin has a much lower impact on the planet's resources than proteins of animal origin", the university professor tells us, as he tastes the second dish prepared by Chef João Silva: lamb ravioli and skewered loin with rosemary, served with Japanese adzuki beans and vegetables.

Anabela Teixeira remembers a film she saw recently, the well-known "Cowspiracy" (2014), by Kip Andersen and Keegan Kuhn, which exposes a series of situations and figures, practically unknown to the majority of the population until then, about rearing animals for food. Such as the fact that 51% of gas emissions responsible for the greenhouse effect are caused by cattle farming and related activities. But if we're talking about cattle farming, we're also talking about fishing, "which is carried out in an unsustainable manner", she adds. "To catch certain kinds of fish, a series of other fish are killed which are becoming extinct".

"The film had a huge impact on me", the actress admits.

"The use of proteins of vegetable origin has a much lower impact on the planet's resources than proteins of animal origin"

*PROF. ANTÓNIO
MONTEIRO*



DESSERT MAKING WISE COMBINATIONS WITH PULSES

THE THIRD

dish to come to the table - an almond and chickpea tart with coconut "chantilly". As a nutritionist, Susana Pasadas is well aware of the benefits of this pulse for our health and well-being. "It's a precious source of niacin, which is a very important vitamin for a series of body functions", she says. Besides "being beneficial for the immune system, it helps to reduce tiredness and fatigue". "A diet that is rich in chickpeas helps to lower cholesterol", António Monteiro advocates, with the consent of Susana, who then stresses "that in reality, all pulses help to reduce

cholesterol levels as they are very rich in soluble fibre". That fibre, the nutritionist explains, "has a very positive effect on the failure to accumulate cholesterol in our metabolism", besides "having a huge impact on our feeling full". "Just a small amount of pulses is enough for us to be well fed and without that sensation, which affects everyone generally, of needing to eat more", she says. There are an increasing number of people choosing a diet where pulses are the main and exclusive source of protein. António Monteiro says, however, that the "transition from consuming animal protein to vegetable protein must be done "carefully". But why? Susana Pasadas explains: "Although the percentage of protein in pulses is, in fact, high, they do not contain all the essential amino-acids. It is therefore necessary to "take some care with the combinations" as pulses have anti-nutrients in their composition - which on the one hand are very important for preventing some kinds of cancer, such as polyphenols; but on the other hand, lead to a decrease in iron absorption, such as phytates. We need to "make wise combinations", in order to "take the greatest advantage of this kind of food", such as combining pulses with cereals or pulses with food with a high vitamin C content. The nutritionist is a fan of the Mediterranean Diet, due to the variety of food included. "We can partly replace animal protein and we can enrich our diet with certain minerals which are important". That's the message the health and nutrition experts are trying to get across nowadays.

"By consuming pulses, we are contributing not only to our health but also to the health of the planet"

ANABELA TEIXEIRA

MEDITERRANEAN DIET @Jerónimo Martins

Pingo Doce, the Group's leading supermarket chain in Portugal, adopts the principles of the Mediterranean Diet as a differentiating feature for developing its Private Brand products and the meals from the Meal Solutions business unit. "Sabe Bem" (Tastes Good), a bi-monthly magazine, with an average print-run of 160 thousand copies, aimed at Pingo Doce customers, provides recipes and articles on this kind of diet. The in-store leaflets for publicising the Pingo Doce brand launches communicated the Group's Nutritional Policy, the brand's values and the existing offer. Although the Pura Vida products are mentioned in all of them, a specific "0% Lactose Pura Vida" leaflet was created to provide information on new products for those with that sugar intolerance. These leaflets had an average print-run of more than 350 thousand copies. Every month, Pingo Doce provides a list of gluten-free and milk and lactose-free products, helping people to make an informed choice of these products.



ALMOND AND CHICKPEA TART WITH COCONUT CHANTILLY

They might not be the most immediately obvious thing to eat for dessert, but there are many ways to use them. High in protein and fibre, and low in fat, they can stand in for butter and flour, deliver moisture, texture and richness. Pulses official blog: <http://voltaterra.pt/> recommends two desserts recipes: apple cake with chickpea purée and chickpea gingersnaps.



ARA

WHEN MUSIC IS THE VOICE OF A BRAND

Miguel de Narváez combined advertising and music to bring together Colombia's multiple regional music genres into one catchy jingle: "Ara, alegría al mejor precio".

Within the country's lively and ever-evolving musical environment, music positions itself as a constant expression of Colombian culture. During Cartagena's Carnaval, costumed choirs perform "chirigotas", a carnivalesque and satirical genre of folksong, through the streets.

SOME

say it is the "land of a thousand rhythms". In Colombia, the passion for music is reflected in both cultural and regional terms, with a rich ancestral and geographical diversity of sounds. This translates into different regions having their own particular music genres.

As the Jerónimo Martins Group was gearing up to open its store chain in the country, something important, beyond the naming – Ara –, logo and slogan – "alegría al mejor precio" –, was missing: an audio identity. After all, music would have an important part to play in the brand's positioning.

The challenge was to create a brand jingle that would convey this richness, making it recognizable by people from different regions. Miguel de Narváez was instrumental in achieving a result that successfully blended Colombian music genres and brought out the joyous feelings associated with the Ara brand.



MIGUEL DE NARVÁEZ

Given that “advertising has a lot of technique” and “music is definitely an art”, when one mixes technique with art, the result is always a “smash”

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Miguel de Narváez doesn't want to play favorites when it comes to Colombian music genres but he confesses a predilection for salsa, a rich genre with “drums, pianos, brass, great singers and great lyrics”.

Miguel de Narváez considers himself to be both an advertiser and a marketer but, most of all, he sees himself as a music producer and composer. Fundamentally, he is a “real fan of great brands, great music, telenovelas (soap operas)” and, honestly, anything with sounds. This is what makes Miguel de Narváez enthusiastic about his work.

In his professional life, Narváez enjoys mixing advertising, marketing and music. Given that “advertising has a lot of technique” and “music is definitely an art”, when one mixes technique with art, the result is always a “smash”, always “something memorable”, reaching both the “head and the heart of every consumer”.

He started his career very young, composing jingles and songs for his girlfriends and “playing guitar and piano at home”. In fact, Narváez had piano lessons from the time he was only six years old, having started to play without sheet music. At the beginning of his adolescence, he wanted to be a rock star and joined rock bands in the neighborhood and at school, competing at music talent shows. Alongside these bands, Narváez always played popular and catchy songs, which made his audiences cheer.

One day a very important advertiser, Christian Toro, gave him a chance to work at his agency – Publicidad Toro – where Narváez learnt a lot about advertising. This world was full of advertisers, communicators and photographers, allowing Narváez to foster his creativity and bring his music and expression into his work life. Sonido Comercial, a part of a small conglomerate called Miguel de Narváez Música y Estrategia, brings the workflow and techniques of the advertising world into the environment of a music production company. This marked a change in the Colombian market and, according to Narváez, “the reason Sonido Comercial became so important in Colombia and a benchmark for any musical company in our country”.

When composing, Narváez feels an “unexplainable connection with God”, arguing that his ideas come from an unknowable place. He merely does it, even sometimes things he couldn't imagine he was able to compose. When working with advertising or television, there were a lot of input: brand requisites and ideas. The most interesting part of the job is “trying to interpret what God gives” him in order to play it to the world.

The process of composing and creating a jingle is “quite complex”. It usually comes from a specific idea or need that the client – i.e. the brand – has. The process brings together “the client, the product, the ad agency, the creatives and, then, the music”. Understanding this chain, where the message comes from and what the brand pledges to communicate, is paramount when composing a jingle. Each one originates from a strategic plan, it is

not a spontaneous process: “it has to respond to many objectives and specific communication lines”. The main challenges, therefore, are what the client wants, plus where the consumer will be and what he likes. The ideas, then, inform the jingle. It's a matter of “picking the perfect talents to interpret” the concept: who sings, who plays the music, etc. This production has to “be totally committed” to the brand. This is why, upon listening a jingle, one enjoys the jingle because “that person singing to you or that music that you're listening to matches the brand”.

THE FORMULA FOR CREATING A JINGLE

There are, however, formulas to be followed in order to create a hit jingle. For Narváez, the most important aspect is being “honest with the brand and honest with the consumer”. This means “being logical, being practical, being catchy” and it translates into “short words, short melodies, short messages” and “honest musical patterns”. It also implies speaking in a normal way, not in a way a marketer would.

This is a different process for writing music for films or television. In these cases, the length is, of course, very different, since jingles only last for 20, 30 or 40 seconds. Scores allow for the development of a melody in a more relaxed and in a richer way. There are also a lot of different feelings you have that you underline with music, with soap operas and films. While every jingle is challenging – “each brand, each client is absolutely challenging” – the one that stays in Narváez's mind is “Marca País”, a song written for Colombia as a brand.

The Ara jingle, in particular, was a challenging one. This meant questioning: “how to interpret a happy brand, how to interpret a popular brand, how to interpret a brand that wants to be in the heart of each little city in Colombia and become a part of so many people”? Translating this means it “can't be music for the North Coast or the Pacific Coast or from the Center, it has to be a little more ‘global’”.

The main factor was not regionalizing happiness because “happiness is global”, but it had to retain the Colombian feel: drums, Colombian instruments, etc. The singing was particularly important with this jingle as it is “neutral”, without the various accents that occur in Colombia, so that each and every person connected to the song as if it were from their zone. There was also the question of existing different musical genres within Colombia: vallenato, cumbia, salsa, and many more. However, given that it is one brand, Narváez - who has been on board since the creation of the brand itself - created one jingle by “mixing all of these in one tune but with very neutral singing and with a very catchy jingle”. The reward and fun part comes when Narváez sees people singing the Ara jingle as if it is their own.

Due to the fact that Jerónimo Martins is a Portuguese company, Narváez was curious to see what would be the reaction to Colombian singing, to the melody, to the jingle and how they “expressed Ara in music”. When the positive feedback came, especially how Narváez had integrated music and image, it was “so refreshing” for “all the people that worked for Ara with great passion”. And the jingle was born: “Ara, alegría al mejor precio”.



The Ara chain has around 200 stores in three Colombian regions: Caribbean Coast, Colombia's Coffee Region and Bogotá. In every store, music sets a joyful environment for the customers.

BREXIT *ONE WAY* OUT?

The UK's unexpected decision to leave the European Union raises more questions than provides answers. Four specialists try to cast some light on Brexit seen from the Polish and Portuguese perspectives.



© Christopher Furlong / Getty Images

Polish Dominik Wasilewski poses outside the Dwa Koty Polish Delicatessen in Crewe, England. The picture was taken on April 1, 2008, a cheerful time for Poles long before Brexit. Crewe, in Cheshire, has one of Britain's largest communities of Poles in the UK.

BREXIT MAY BE AN OPPORTUNITY FOR POLAND TO WIN BACK ITS YOUNG CITIZENS

AGNIESZKA BIELEWSKA



EXPERT ON INTERNATIONAL MIGRATION. ASSISTANT PROFESSOR AT SWPS UNIVERSITY OF SOCIAL SCIENCES AND HUMANITIES, WROCLAW

THE anti-immigration campaign was a driving force for Brexit voters. Polish migrants are the largest group of foreigners living in the United Kingdom. They live and work there as European Union citizens. Now they may be forced to leave. They can bring back to Poland their energy, knowledge, and international experience and also slow down the process of society ageing in Poland. However, if Poland makes no effort to integrate them, they may end up as unemployed or move to other countries. Poland joined the European Union in 2004. At that time, the United Kingdom was one of the only three countries that opened their labor market to Polish citizens. As a result, a hundred thousand Poles decided to move there. In December 2003 there were only 75 thousand Poles living in the United Kingdom, but by the end of 2014, there were already 853 thousand according to the Office for National Statistics (UK). They were mostly young and well-educated people who believed that Poland with its high unemployment rate (19.5% in May 2004) and low wages did not offer a future matching their ambitions. In the beginning, they did not believe their stay in the UK would be permanent. They expected to live there for a few years, develop language skills, some professional experience or just to save money for some particular aim – such as buying an apartment or starting their own business in Poland. Some of them, typically so-called “fluid migration” seen in modern Europe, did not have a plan at all. They did not know how long they would stay, or if and where they would move on later. In spite of this lack of settlement aspirations, most of them have stayed in the UK. Now they may be forced to reinvent their future. Their situation is uncertain mainly because they believed in the strength of their European Union citizenship. Their trust in the European Union was so strong that they have never applied for a British passport. Between 2009, when first post-accession Polish migrants could have applied for British citizenship, and 2013, fewer

than 13 thousand Poles received British passports. The vast majority believed that EU citizenship was good enough to guarantee their rights. Brexit took them by surprise. They were surprised not only by the political change but also by the change of the public sentiment towards foreigners. When they first came to the UK they were well received by the British society. The press informed the public about young hard-working and fast-integrating Poles. The problem started with the crises of 2008-2009 when episodes of violence against Polish migrants started appearing in the headlines of the British media. Poles were accused of stealing jobs and their children being a burden on the education and benefit systems. Despite this new sentiment, Poles were still feeling positive enough to start families in their new country. Polish women in the United Kingdom are more likely to have children than those living in Poland. Between 2005 and 2013, 120,764 children in the UK were born to Polish mothers. In 2014, over 23 thousand babies had at least one Polish parent, with around 16 thousand having both parents of Polish origin. At the same time, Poland has one of the lowest birth rates in Europe and a rapidly ageing population. The return of the young families would not solve the demographic problem in Poland, but it would certainly be a demographic blessing. British decision-makers claim Brexit will not aim at migrants who have already settled and work in the UK. However, the Oxford University Migration Observatory estimates that the 3/4 of the current EU migrants working in the UK will not be able to meet the visa requirements for non-UK citizens. It is unlikely that Polish families with young children will be forced to move out. However, there is high probability that Brexit will stop those who could become migrants. Every year, over a hundred thousand Polish people, mostly in their twenties and early thirties, leave for the UK. In 2015 alone, Poles received 111 thousand National Insurance Numbers (a number necessary to start working in the UK legally). If tens of thousands of potential migrants stay at home due to Brexit, it will be a good enough reason for Polish demographers to celebrate. The challenge will be to make these migrants and potential migrants beneficial for the Polish economy. If they are not included into the Polish labor market, they may end up being long-term unemployed or leave. The UK may close its doors, but there are still opportunities elsewhere. Polish migrants in the UK are well-educated but often work below their qualifications. It is hard to imagine that those who work as builders or cleaners for British wages will be happy to do the same in Poland for a Polish wage. On the other hand, they may have formal qualification to work in white-collar positions, but they usually do not have relevant experience. An additional obstacle is that returning migrants are often viewed as too demanding employees. The work culture in Poland is more hierarchical and rigid. Returning migrants are perceived by potential employers as not able to fit in. The already known stories of returning migrants show that those who decided to come back were usually not able to find work for themselves in Poland, and most of them moved abroad again. If the Polish State does not make an effort to facilitate their re-integration, and especially does not help them to find their place in the labor market, Brexit can be a threat rather than an opportunity for Poland.

BREXIT AND THE ANGLO-PORTUGUESE ALLIANCE

OVER the course of two decades, from the end of the Second World War to Rhodesia's unilateral declaration of independence, the alliance with Great Britain lost its central role as the ultimate guarantor of national independence and colonial integrity for Portugal. This period witnessed the rise of the United States of America as both superpower and leader of the Western world, a development which Portugal's dictatorial Prime Minister, António de Oliveira Salazar, did not always accept with good grace; the invasion of Portuguese India, in December 1961, which shook Portuguese trust in British diplomacy and guarantees of military collaboration; and the start of Portugal's colonial wars in Africa, which drove Lisbon and London, the later now committed to decolonization, further apart. Portugal's economic and military cooperation with Ian Smith's illegal regime in Rhodesia, which Great Britain tried to put paid to by a variety of means, underscored the extent to which Salazar's New State regime had drifted away from Portugal's traditional relationship with its oldest ally. What was true on the strategic plane did not necessarily apply, however, on the economic plane. If in the former the loss of British global power had led Portugal to seek new international partners, in the latter the importance of the British market for Portuguese exports forced Portugal to keep up with the United Kingdom as London navigated the maze of post-war European economic relations. In this manner, Portugal joined the European Free Trade Association when this very British answer to the European Economic Community was established, in 1960, having secured in advance some protection for its fragile industrial sector. However, as soon as the UK applied for membership of the EEC – a more ambitious organization, with supranational institutions and a common external tariff – Portugal had to follow in its footsteps in order to secure its access to the British market. Lisbon quickly requested associate membership of the EEC, a dramatic step for the New State, since it implied that within fifteen years Portugal would be ready to join the EEC as a full member. This would entail a significant loss of sovereignty and a complete transformation in its relationship with the “overseas provinces”, as Portugal's colonies were then known. How a nationalist, colonialist and authoritarian regime such as Salazar's could hope to survive in the context of the EEC was not easy to see, but in any case General de Gaulle's veto of British accession rendered this a purely academic question. In the decade that followed, trade with Great Britain declined in overall importance for the Portuguese. This being the case, Portugal's desire to enter the EEC – a step made possible by its transition to democracy, begun in 1974, and by the ensuing decolonization – was no longer motivated by the simple desire to follow London: staking a place in the Common Market as a whole was now identified as the priority for Lisbon.

Portugal's historic relationship with the UK (and before it, with England), which includes a formal alliance dating back to the 14th century, was thus diluted in the post-war years through shared membership of international organizations such as NATO, EFTA and the European Union. This marked the end of the military cooperation evidenced during the First World War and the Napoleonic campaigns; of Britain's blanket guarantee over the integrity of the Portuguese Empire; and of a long economic interchange, punctuated by important settlements such as the 1703 Methuen Treaty (negotiated during the War of Spanish Succession) and the 1810 Treaty of Commerce and Navigation (negotiated during the Napoleonic Wars). In these treaties London capitalized on its military strength – notably at sea – in order to extract significant concessions from the hard-pressed Portuguese. The increasingly asymmetric nature of the Anglo-Portuguese Alliance led to moments of tension between the two countries, especially once sovereignty began to be conceived of as the property of nations, not of a monarch. Among these flashpoints can be counted the execution of General Freire de Andrade and the other conspirators who, in 1817, wanted to free Portugal from a British-led Regency, and the British Ultimatum of 1890 over disputed territories in Central Africa (in response to which the current Portuguese national anthem was composed, its original version calling on the people “to march against the Britons”). Strategic and economic realities meant that the Alliance survived all crises, its importance being understood by successive Portuguese governments from the Constitutional Monarchy, through the First Republic (1910-1926), to Salazar's New State. However, the frustration often felt in Portugal was genuine, and could be exploited. This is what Germany did, for example, in its 1916 declaration of war against Portugal. Having analysed Portugal's diplomacy since 1914, this document asserted that “the Portuguese Government made it known that it considers itself an English vassal which subordinates all other considerations to English interests and wishes”. All of this belongs to a distant past in which continental Europe harboured threats to Portugal's very independence, against which a powerful ally was needed. In turn, Great Britain appreciated the value of a friend on the continent, especially one with considerable colonial possessions. Today the UK is simply one of many priority destinations for Portuguese exports, absorbing 6.7% of these, and generating 3.1% of Portugal's imports. British tourists are an important source of revenue for the Portuguese economy, while a growing (if hard to pin down) number of Portuguese emigrants have chosen to settle in the UK. Gone are the days when choices made unilaterally in London dictated Portugal's diplomatic posture. Even so, Brexit represents a significant concern for Portugal, as a result of its possible consequences for both bilateral relations with the UK and the future of the European Union.



FILIPE RIBEIRO DE MENESES



HISTORIAN, PROFESSOR AT MAYNOOTH UNIVERSITY, IRELAND.

John of Gaunt dining with John I of Portugal, the King of Portugal. The Duke of Lancaster left behind his daughter Philippa of Lancaster to marry King John in February 1387, in order to seal the Anglo-Portuguese alliance.

As soon as the UK applied for membership of the EEC, Portugal had to follow in its footsteps in order to secure its access to the British market



WHERE ARE YOU HEADING AT, BRITANNIA?

BREXIT

proved to be a shock both for British and European elites. Until now it is still not known under what rule the United Kingdom will leave the European Union and what the related actual economic and social consequences will be. It is beyond any doubt that the referendum experiment of Prime Minister Cameron got out of control leaving everyone with a paramount problem.

The European and British elites still could not recover after the announcement of the results of the British referendum on membership in the EU. The referendum, which most likely was intended as a mere safety valve to enable a release of negative emotions rising within the British society, proved to be a real earthquake. Brexit became a fact despite a quite good economic outlook; it was not also an outcome of a scandal or unpopular decision of the European Commission. It was a manifestation of anger of a society which views the functioning of the EU from a slightly different perspective than those in the rule. The British were fed up with the fact that they, themselves, and their State were governed by non-respected Brussels officials who, instead of acting in the interest of Europe, have been

The declining standard of living on the British Isles will make employment migrants to start returning to Poland

waging their ideological wars. They were fed up with uncontrolled inflows of immigrants, who have been perceived by less affluent Isles' citizens as a threat for their jobs.

What will the economic consequences of Brexit be for the continent? Certainly the Community's economic potential will be greatly depleted compared to the USA or China. We will also painfully feel the absence of British contributions to the EU budget. The position of the United Kingdom itself will also suffer if obstacles in access to the European market emerge. Will the Community impose any economic restrictions on the United Kingdom, and – if yes – what will they be? Both parties are aware they are indispensable for each other. Probably an agreement will be concluded modelled on Comprehensive Economic and Trade Agreement (CETA) recently signed with Canada. The British would like to participate in the Common Market free from Brussels directives and masses of immigrants wishing to settle in their country.

It is beyond any doubt that the outcomes of Brexit will be mostly felt by the United Kingdom itself. According to estimates commissioned by TheCityUK, the country is likely to lose as much as 38 billion pounds (around 44 billion euros) on leaving the European structures. Certainly this is one of the most pessimistic scenario. Is the rejection of the Common Market for the benefit of regaining control over immigration really worth such sacrifices? Or perhaps just cheap populism sneaked into the Conservative Party? Today even party colleagues of Ms. Prime Minister Theresa May have increasing doubts about whether so-called hard Brexit makes sense. The same doubts are shared by the High Court, which deemed that the Government is not allowed to trigger Article 50 on its own. Decision on that matter is up to the Parliament, which means that the House of Commons followed by the House of Lords will be voting on Brexit. However, the Government of Theresa May disagrees with such interpretation of legislation by the High Court and declared resolved delivery on the will of the people, i.e. exit from the EU. Nevertheless the entire turmoil may prove beneficial for the British, giving needed time to develop an exit scenario optimal for all concerned parties. Regardless of its final shape, Brexit is not just a matter of big politics, but also fears of 850 thousand Poles living on the British Isles. So far the British Prime Minister has declared that changes will not be disadvantageous for the Polish Diaspora living there. However, watching the first "spontaneous" behaviours of the British, one can conclude that long-concealed fears and frustrations are now coming to the fore. The situation is realised through assaults against representatives of other nationalities, particularly Poles. One should expect the authorities of the country to take resolved remedial measures related to that matter, which is already done in practice. A question remains however on joint patrols of the British and Polish police and a supplement in a popular daily suffice? Guaranteeing physical security is one thing, but, on the other hand, both Poles staying in the United Kingdom and Brits themselves are facing gloomy economic prospects. According to forecasts, inflation in the UK may reach the level of 4%, which accompanied by the pound's value reduction by even as much as 20% will result

in an unavoidable economic crisis, entailing rise in the price of commodities to the level of 15-20%. In response to the crisis, the authorities will freeze welfare benefits and fiscal exemptions. It is obvious that most harmed will be the poorest people taking advantage of social assistance, hired in the lowest-paid jobs, and frequently those will be immigrants. As a consequence, the level of real wages will go down. Also entrepreneurs envisage mass layoffs in response to inflation. Eventually, the living standards will be lowered and social dissatisfaction may turn against immigrants, who presently often occupy the least attractive jobs. When unemployment increases, attractiveness of such jobs may increase as well. Paradoxically, the British may attain their goal, i.e. reduction of immigrants' inflow through lowering of the living standards in their country and depleting its attractiveness. But is this really what they wanted?

Returning to Poles now. Polish exporters have particularly suffered owing to the decline in the value of the British pound. The long-term contracts they signed oblige them to perform contracts which become unprofitable from day to day. In October, the exchange rate of the British pound dropped to the level of 4.90 zlotys while just back in June it was 5.70 zlotys. Certainly the entrepreneurs will offset the related losses when signing new contracts but an unstable pound will continue for a long time to make exports to the United Kingdom a highly risky business. On the other hand, the declining standard of living on the British Isles will make employment migrants to start returning to Poland. This is an unexpected - and the best for Poland - aspect of Brexit, particularly today when Poland – just like a majority of European counties – is struggling against low demographics.

ANDRZEJ ARENDARSKI



CO-FOUNDER AND PRESIDENT
OF THE POLISH CHAMBER
OF COMMERCE

DOES EUROPE ALWAYS HAVE TO END THE SAME WAY?



Anti-Brexit march and rally in London

THIS

is as if we have travelled a large vicious circle from WW2, through the European Economic Community, EU, Euro, and back to the continent shaken with national prejudices and suspicion. On all counts, Brexit will deplete the European Union. Literally and figuratively. The internal market will shrink, labour market will suffer and the same concerns chances to compete against the USA or China. And ironically those are not the British, but rather such states as Poland who are bound to suffer the most, due to Brexit. Tough divorce terms will prove particularly painful for the nations that have built from scratch their economic potential on the Union's openness and Free Market and, for the first time since WW2, managed to narrow the gap between them and the West in terms of quality of life. Striving for the possibly mildest Brexit terms, Poland is also fighting for its own welfare.

Following some inherent feeling of hurt pride and against common sense, Brussels rejects today the possibility to maintain Free Trade with the British Isles after March 1, 2017. The experience of negotiations with Greece, United Kingdom, Turkey, TTIP and CETA lead us to assume that EU's officials lost the ability to conclude any international agreements. What stood in their way in the past, i.e. arrogance, absence of effective consultations mechanisms and being guided by abstract ideas of a Union coherence instead of an economic pragmatism, still remain a problem. The same people whose campaign aimed at intimidating British voters was discredited, are now supposed to negotiate with London. What is even worse, in their vendetta, they have powerful allies in German, French and Italian cities interested in taking over profitable businesses that, so far, were based in London City. Although Poland is part of this strange looting campaign, it shouldn't, in any instance – and after the recent visit of Prime Minister Szydło to the United Kingdom we can see it is not trying to – weaken the position of the United Kingdom. Hundreds of billions of euros of the British business that West European governments are counting on will not compensate for the losses resulting from losing the British market, and – what is equally important – the loss of a powerful defender of market or conservative solutions referring to traditional values and best experiences of the European economic power.

The United Kingdom – sometimes irrational, sometimes selfish in its demands – throughout all those years has allowed Europe to maintain a political equilibrium. It suppressed Germany's attempts to model Union to its liking and chastened socialist sentiments of France or Italy. For such new members as Poland, it was an ally in hassles with Russia or disputes over immigration policy. Brexit is definitely shifting the European centre of gravity towards Germany. By forcing other member states to lead a tough internal debate and creating a centre for alternative thought in the Union, the United Kingdom also paved the way for weaker states to have an assertive presentation of their own interests. The atmosphere created after Brexit by the European Commission's official is not conducive for a debate. On the contrary: it tries to coerce consensus in the name of defending the Union's structures. The problem is, the more the politicians assure us they defend European cohesion, the more divided Europe seems. The more they swear they want to build a Europe free of prejudice, the more powerful European nationalistic parties and organisations become. The louder they speak about the necessity of swift European integration, the faster the mistrust for the European Commission grows. According to the most recent Eurobarometre data, the trust for the EU declined from 57% in 2007 to 33% in 2016.

Even before the negotiations with London started for good, Berlin and Brussels adopted the worst possible strategy. One of intimidation. Threatening 62 million people they would lose access to the European market. A tough negotiation position makes any trade agreement dependent on concessions related to immigration issues. It matters

**TOMASZ
WRÓBLEWSKI**



*POLISH JOURNALIST, PUBLICIST
AND COMMENTATOR
ON CURRENT AFFAIRS.*

much less how ungrounded those demands are in view of the growing opposition within the Union to German open borders policy; it is much more interesting that termination of free trade agreements with London will hurt Germans and French the most. For Poland this would signify the loss of the second biggest trade partner and trade volume at the level of 50 billion euros annually. For the Netherlands, France, Italy those numbers look even worse. Germany alone would have to pay almost 3.5 billion euros more as a result of new custom tariffs. And all of this is only to prove to the British they made a mistake and to scare away any potential followers. There is not a trace of economic rationality in it. At most this is just a lesson for the states frequently entering disputes with Brussels, showing them what they can expect in the future, e.g. what the dispute between Poland and Germany about the shape of climate policy may lead to, or what a common immigration policy may look like once the powerful voice of British opposition is missing. Will Italy be another country whose budget and banks will be subjected to supervision from Brussels? Or perhaps Poland will be summoned and held liable for its politically incorrect, conservative government?

If Berlin gets what it wants and the Union restores custom tariffs in trade with the United Kingdom, all the talk about an even more coherent Union will end up in more secessions. States having the least to lose will leave one by one - those free from the Euro and less dependent on EU aid. They will be followed by such countries as Poland, fearing that immigration quotas, fiscal unification or financial supervisions will deprive them of their own sovereignty. With each successive state the process will be faster, simpler and each of them will leave Europe even more divided and paralysed with nationalistic rhetoric.

What would the Founding Fathers of the European Union do? They would certainly not count on rebuilding the trust in the idea of a great Europe by antagonizing and blackmailing the British. They would probably take a deep breath, overcome any personal offences and return to the Union's roots. To market freedom. Instead of closing the borders, they would open them even wider, repeal thousands of absurd regulations which the European Union has multiplied throughout all these years. They would then offer to United Kingdom an agreement not worse than the ones with Norway, Switzerland or now with Canada.

Would this convince the British to return to the Union? We don't know but that would quite certainly help us to avoid something we know all too well from history - when nations are guided by ambitions of their leaders and not by the interests of their citizens.

MAKING “FEED” MEANINGFUL

IN THE HEART OF AFRICA

On the route to offset the carbon emissions of “Feed”, the Jerónimo Martins Group brought the heat to light up cooking stoves in Kenya.

Kenya has served as the initial focus country to launch and raise awareness regarding clean cooking solutions



FIGHTING POVERTY WITH A WARM APPROACH

SUPPORTED by the Jerónimo Martins Group, the project for “efficient” cookstoves contributes toward improving the community’s quality of life and reducing poverty in Kenya. Through TerraSystemics/E)mission, a company specialised in the area of the environment, energy and carbon, the group has ensured the accounting of the carbon emissions (i.e. greenhouse gas emissions) associated with producing “Feed” and ensured the allocation of the respective offset credits, removing them from the market, on its behalf. Built, distributed and installed by the local population, the so-called “efficient cookstove” makes it possible to improve the quality of life of the community, while contributing to the reduction of greenhouse gas emissions into the stratosphere. The project was created

by CO2balance, a leading UK-based carbon credit management company, and is being developed in Likoni, one of the most poverty-stricken areas in the city of Mombasa, southern Kenya. Using the most efficient aerospace technology, these ovens require less firewood and emit less smoke, which translates into fewer health problems caused by smoke inhalation. In Kenya, where thousands of people live with hunger and food is prepared inside the houses in rudimentary ovens, many of them truly improvised, respiratory infections (especially in children), lung cancer and other lung diseases such as chronic bronchitis and asthma, are very common. Experts believe that the emission of toxic gases and the production of large amounts of smoke and indoor pollution are responsible for most of these diseases. “Efficient” stoves, on the other hand, not only reduce the adverse effects caused by inhalation of smoke but also have a substantially lower impact on deforestation, forest degradation, soil erosion and nutrient loss, and contribute to reducing the risk of floods. Initial tests show that they are 50% more efficient than the so-called traditional models. It is estimated that, during the six-year span of the project, carbon dioxide emissions will be reduced by about 34,470 tonnes.

In economic terms, these stoves contribute to poverty reduction by freeing the population from the need and costs of buying firewood. Furthermore, they allow mothers to save time and use it for other activities, not only related to domestic life, but also to the education and care of their children. Included in the Clean Development Mechanism (CDM), one of the three mechanisms introduced in the Kyoto Protocol, carbon credits are certificates issued by environmental protection agencies when there is evidence of a reduction in a company’s greenhouse gas emissions related to the increase in Global warming. These certificates can be sold in national and international financial markets. CO2balance’s mission is to “offer ethical and high-impact solutions to mitigate the effect of climate change”; the international company works directly with other companies that want to reduce their impact on the environment and also with non-governmental organisations. In Kenya, it has been developing several projects in the area of environmental sustainability among local communities. The free distribution of efficient stoves in Likoni, an overcrowded area where 55% of the population lives on less than a dollar a day, is one such project.



**ENVIRONMENTALLY
FRIENDLY**
@Jerónimo Martins

The Jerónimo Martins Group, through TerraSystemics/E)mission, a consulting firm in the field of the environment, energy and carbon, ensured the accounting of carbon emissions (i.e. greenhouse gas emissions) associated with producing “Feed” and ensured the allocation of the offset credits by withdrawing them from the market, on its behalf.

Kenyan clean cooking enterprises and non-governmental organizations have received targeted funding support

THE MAN BEHIND THE NOBEL PRIZE

This year, the Nobel Peace Prize committee attributed the award to the Colombian president, Juan Manuel Santos, to encourage him and his Government to continue striving for peace in the country.

NAME
JUAN MANUEL SANTOS
YEAR OF BIRTH
1951
COUNTRY
COLOMBIA



COLOMBIA GETS AN EXTRA IMPULSE FOR PEACE

JUAN

Manuel Santos Calderón was born in August 1951, in the heart of one of the country's powerful and influential families, that owned the renowned Colombian newspaper "El Tiempo" from 1913 to 2007. His great-uncle, Eduardo Santos, was President of Colombia from 1938 to 1942 and his cousin, Francisco, was vice-president of the administration of former President Álvaro Uribe, whom Juan Manuel Santos would later succeed.

After two years of military service, Santos left Colombia and went to the United States, as did many of the young elite from the Colombian capital, Bogotá, at that time. He studied Economics at the University of Kansas before going to London, where he continued his studies at the London School of Economics. While in the British capital, he took on his first political role: he was nominated delegate of the National Federation of Coffee Growers, an office he held for nine years before returning to his homeland. Back in Colombia, he took charge of the deputy directorate of the family's newspaper, where his father had worked as the editor for more than 50 years. Divided between journalism and politics, Juan Manuel Santos ended up choosing the latter. In fact, he is said to have "never drifted far from the path to the Presidential Palace", according to "Colombia Reports", the English language online Colombian newspaper.

In 1991, César Gaviria, the country's President from 1990 to 1994, invited him to be responsible for Trade and he accepted. After two years, Juan Manuel Santos was nominated "Designated Official to the Presidency", an office that would later give rise to that of Vice President. In 1994, he really began to prepare the way for his future presidency by creating the Good Governance Foundation. This enabled him to apply and test the Third Way - "the market whenever possible, the State whenever necessary", according to its ideologist, Anthony Giddens - which would become the basis for the governance of the "Partido Social de Unidad Nacional" (or U party), formed by him in 2005 to bring together supporters of Álvaro Uribe.

Uribe was elected President of Colombia in 2002 and gave Juan Manuel Santos the responsibility for Defence. That is when the peace negotiations with the Revolutionary Armed Forces of Colombia (FARC) guerrillas began. Thanks to his efforts and skills in reconciliation, for which he is so renowned today, he managed to ensure the release of the activist Ingrid Betancourt - who was kidnapped by the FARC from 2002 to 2008 - and three other American citizens that were also in the hands of the guerillas. In 2010, Juan Manuel Santos was elected President of the country with 69% of the votes. Santos started an era marked by inclusive policies and advocacy of human rights within the country. The country's economy, which up to then was

undergoing a severe crisis, started showing the first positive signs, recording a yearly growth of 4%. Inflation decreased and his approval rate reached 80%.

In 2014, due to the fluctuations in the economy with the decrease of the profits from oil exports and the adoption of not very popular policies regarding education and employment, Juan Manuel Santos was no longer that absolutely all-embracing figure. However that didn't prevent him from being re-elected President in that year's election with 50.95% of the votes. The Nobel Peace Prize was now awarded to him due to the signing of the peace agreement with the FARC, which aims to put an end to over 50 years of a conflict that took the lives of around 260 thousand people and displaced six million, apart from a series of other abuses and violations of human rights. The day his name was announced as the winner of the great award, the Norwegian Committee said it hoped that the prize "will give the President further strength to continue to work to achieve the right to peace until his very last day in office."

"It is the Committee's hope that in the years to come the Colombian people will reap the fruits of the ongoing peace and reconciliation process", the Committee said. The agreement with the FARC was rejected in a plebiscite that took place on October 3. In the opinion of many analysts, the rejection reflects the population's failure to understand what is said to be a lack of responsibility attributed to the FARC for the crimes committed. However, the attempts to bring peace continue in the country and Juan Manuel Santos has already assured everyone that he is not going "to give up". ●

Eduardo Santos

The great-uncle of the current President of Colombia was a leading publisher and politician. He owned the prominent newspaper "El Tiempo" serving also as President from 1938 to 1942.



© Wikipedia

People sew white cloths with names of victims of the Colombian conflict painted in ash, at the Bolivar square in Bogota, on October 11, 2016. Colombian President Juan Manuel Santos and his Government are working to end half a century of conflict in the country that has killed more than 260,000 people, left 45,000 missing and uprooted nearly seven million. He called a referendum on a historic peace agreement between the government and the Revolutionary Armed Forces of Colombia (FARC), but it was rejected by voters.

© Jose Miguel Gomez / AFP / Getty Images



"By awarding this year's Peace Prize to President Juan Manuel Santos, the Norwegian Nobel Committee wishes to encourage all those who are striving to achieve peace, reconciliation and justice in Colombia", the body explained.

HEART BEAT *HEROES*

*These are the stories of the heroes behind
the first heart transplants in Poland,
Portugal and Colombia.*

STRAIGHT FROM THE HEART

© Oxford Science Archive / Print Collector / Getty Images



The Italian physician Santorio Santorio is considered the founder of quantitative measurement in medicine.

AT THE beginning of the 17th century, the Italian physicist and professor Santorio Santorio adapted some of the inventions of Galileo Galilei (1564-1642) – of whom he was a friend – to medicine. He did it in a way that had never been done before. From the discovery of the law of the pendulum by Galileo after repeatedly observing an enormous chandelier swinging in the cathedral of Pisa, in Italy, the physician Santorio Santorio created a pulse monitor - *pulsilogium* -, the first device capable of measuring blood pressure. Measuring the pulse through the wrist had already been practiced for many centuries. Doctors were called to the homes of ladies who suffered from “lovesickness”, the so-called lover’s malady, and assessed their condition through the pulse beats of the wrist. Unrequited, absent or undeclared loves were the causes of lovesickness. Santorio Santorio was the first physician to think of heartbeats in a scientific way. Consisting of a scale of inches and a cord with a movable weight made with a transverse line, this pulse monitor devised by Santorio worked in the following way: the Italian physician would move the pendulum and simultaneously measure the pulse with his fingers. Then, the physician would change the length of the cord until the speed of the pendulum coincided with the pulse rate, thus showing the pulse rate as a number of inches. The invention of the pulse monitor by Santorio Santorio paved the way for the discovery of other instruments to measure the pulse. A century after the Italian physician’s invention, John Floyer (1649-1734), born in the United Kingdom, began measuring his heart rate using a clock. He was the first scientist to do so. From Floyer’s discovery, other physicians, such as the Irish Bryan Robinson, Jean Senac and William Falconer, started recording their observations based on the number of heartbeats per minute. Already in the 19th century, the German physician Karl von Vierordt (1818-1884) invented the sphygmograph, the first instrument capable of graphically recording the pulse. Created in 1854, Vierordt’s sphygmograph gave rise to the modern sphygmomanometer, invented in 1881 by Samuel von Basch (1837-1905) and perfected in later years by other physicians such as Harvey Cushing, whose contribution to the field in 1901 helped popularise this device within the medical community. Born in 1561 in Koper, a Slovenian city that belonged at that time to the ancient Republic of Venice, Santorio Santorio was a professor at the University of Padua between 1611 and 1624. In addition to the pulse monitor, he is credited with inventing the thermoscope, an instrument used to evaluate minute variations in temperature. His studies in the area of metabolism are also considered pioneering. In 1614, he published the book “De Statica” *Medicina*, which would influence several generations of physicians.

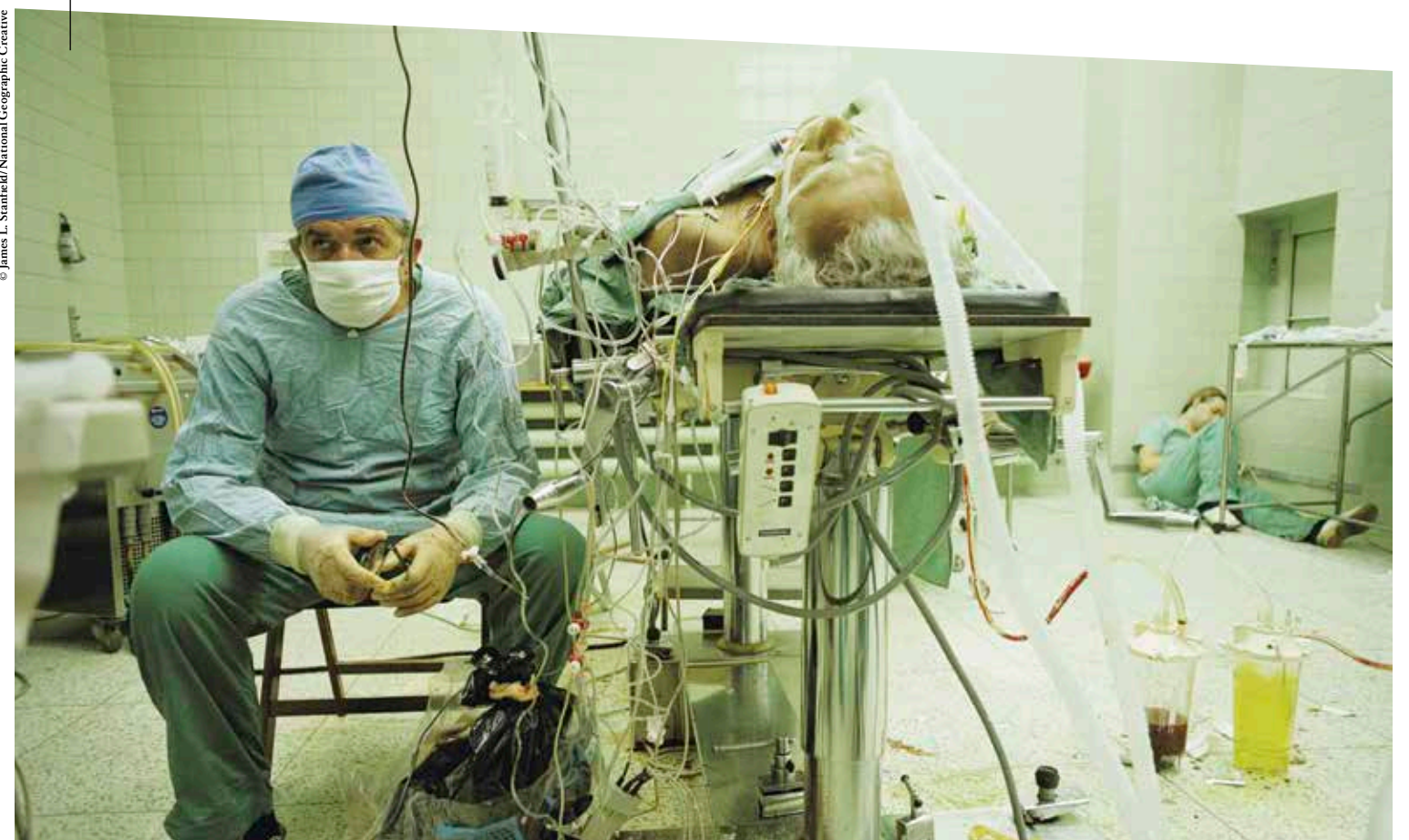


MARIAN ZEMBALA

Cardiac surgeon and transplantologist. In 1985, he assisted Professor Zbigniew Religa in the first successful heart transplant in Poland. In 1997, Professor Zembala performed the first transplant of a single lung in Poland and, four years later, he was the first in Poland to use a heart-lung device in a transplant. Professor Zembala is the director of the Silesian Centre for Heart Diseases in Zabrze.

Chosen by the “National Geographic” as the best picture of 1987, this photograph depicts Dr. Zbigniew Religa keeping watch on the vital signs of a patient after a 23-hour heart transplant surgery

© James L. Stanford/National Geographic Creative



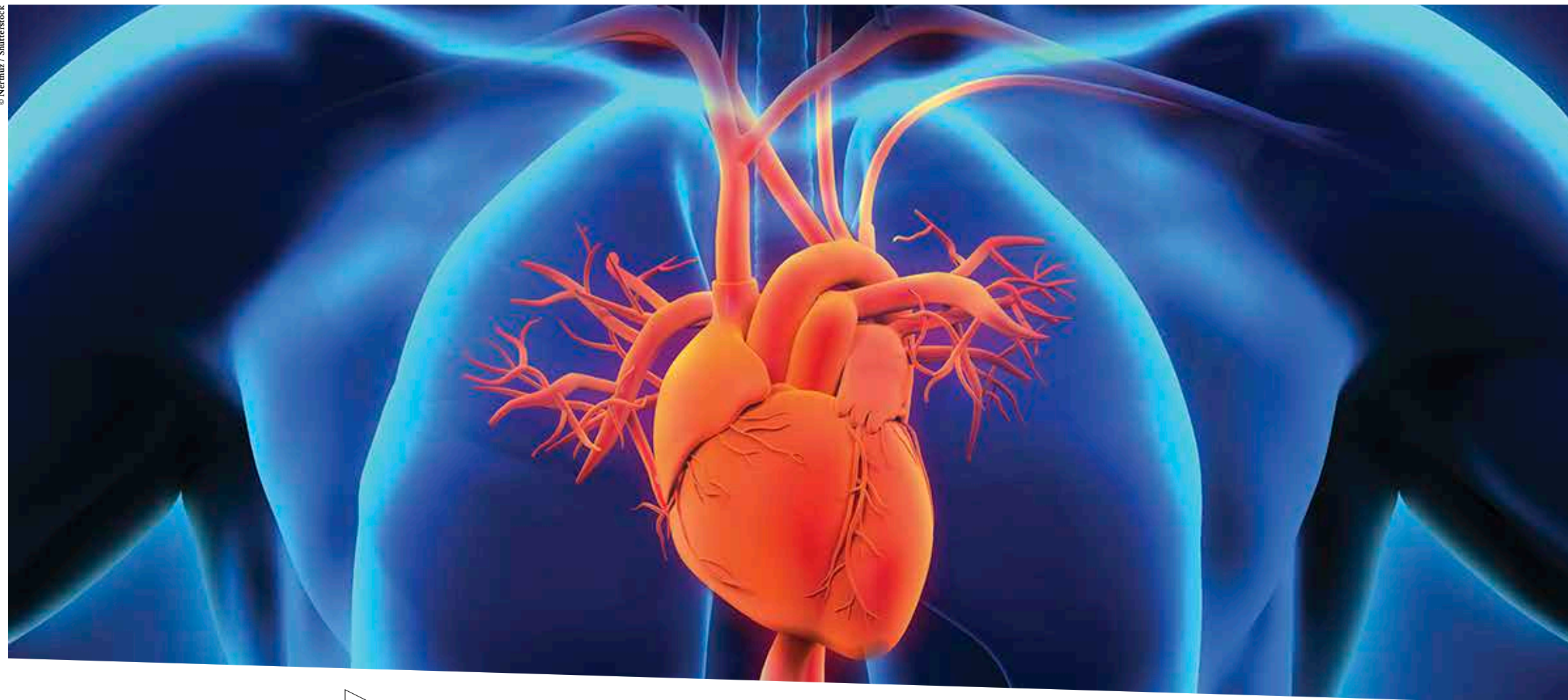
TO RESCUE AND GIVE HOPE

“A memorable event is and will always be the beginning – under the leadership of Professor Religa - in 1985 in Zabrze of the heart transplant programme. We knew we took part in an exceptional event”, says Professor Marian Zembala, a cardiac surgeon who assisted Zbigniew Religa in Poland’s first successful heart transplant back in 1985. “This was followed in 1988 by lungs and heart and lungs transplant programme under my leadership in 2001.”

The first attempt at heart transplant in Poland was made in 1969, in Łódź, by Professor Jan Moll. It failed. The first successful cardiac transplant was made by Professor Zbigniew Religa’s team in 1985. Why as many as 16 years passed by between the first and the second surgery?

The attempt at the heart transplant made by Professor Jan Moll in Łódź in 1969 was an important trial of an outstanding Polish pioneer of cardiac surgery. The team had little experience, just like many other cardiac surgeons all over the world at that time. After the success of Christian Barnard in 1967, heart transplants just started to develop. Besides steroids, no other methods to stop transplant rejection were known – and this is just too little. The effects of a high pulmonary artery pressure were not known. This explains the failure affecting the patient in Łódź. Such failures happened at that time and in many medical centres all over the world. Łódź was no exception but, for us, the noble person of Professor Moll and his workmates will always remain the symbol of pioneering achievements, particularly so because he supported us so much with his authority and rejoiced when we created in Zabrze the heart, and later also the lung transplant programme. Why was it the Regional Cardiology Centre in Zabrze where the decision was made to proceed with the surgery?

The Regional Cardiology Centre in Zabrze – presently the Silesian Centre for Heart Diseases – was the hospital that brought together the best experts in Poland at that time with huge international experience. A cardiologist, Professor Stanisław Pasyk, in 1985 already had many years of internships under his belt in Boston (USA), Germany (Max Planck Institut in Bad Nauheim) and he was the pioneer in Poland of a modern method ►



for treatment of heart attack with the use of Coronary Angioplasty, the second method in Europe after the French cardiology centre in Toulouse; Liliana Goldstein, M.D., was an outstanding children cardiologist with significant and already recognised achievements in the Netherlands. The third individuality was Professor Zbigniew Religa, a cardiac surgeon after internships in the USA, in the Professor Kantrowitz Centre and in the UK, in the centre managed by Sir Terence English. Those three pioneers of modern cardiology were the core of the very powerful cardiology and cardiac surgery centre in Zabrze, in the highly industrialised Silesian Region. Immediately after completion of over four years of on-the-job training in an academic centre in Dutch Utrecht, I had the pleasure – on invitation from Professor Zbigniew Religa – to join the ambitious people establishing this modern centre. My colleague Andrzej Bochenek, M.D. did the same and he became a member of our team after returning from the United Kingdom.

How long did the team prepare for this procedure?

The Zabrze Centre started its operations in the field of cardiac surgery on August 15, 1985 and just a few months later, on November 5, 1985, the first heart transplant was made. We prepared for it for more than two months. This was not long but these were very intense times. Our entire team spent the two days prior to the surgery in the hospital.

Professor Religa recalled that the procedure was followed against a majority of opinions in the Polish community of medical doctors.

Against opinions of some part of the medical community – the most conservative one. But the heart transplant was received very positively by a majority of patients and medical doctors. This was visible in the social support for the performance of this ambitious programme.

What was the atmosphere in the Zabrze team?

What helped us a lot to develop intensively was the very good cooperation between adults' cardiologists and children's cardiologists, anaesthetists and cardiac surgeons. This was the key to success enriched with experiences from the members of the team gained in good foreign centres. We knew we were participating in exceptional events because at that time treatment of myocardial infarction using the method of percutaneous transluminal coronary angioplasty was something extravagant in the widespread opinion of the medical community.

We showed and documented that this was the most effective – and safest for the sick – treatment method. Myocardial infarction was and still is a major killer so a success in this area deserves in particular to be disseminated and supported over any political divisions.

The same concerned heart and later also lung transplant. The enthusiasm of Professor Religa,

an assistant professor at that time, was contagious: after the first heart transplant, in which I participated also with Professor Andrzej Bochenek and other colleagues, he admitted he did not feel very secure. But we had enormous mutual trust in one another. We also knew that he assumed the burden of responsibility for this procedure. I'll remember until the end of my life the first 24 hours when we saw how the transplanted heart was beating again. When the patient started moving his legs and hands and we ascertained he was in contact with us, we rejoiced and started singing: "Glory, glory, hallelujah" – this is an unwritten anthem of Zabrze pioneers. Still today we remind this with pride and emotions.

What criteria determined the decision to choose the 62-year-old Józef Krawczyk as the first candidate for the transplant? You suggested this patient as the candidate...

The patient was recommended for a transplant due to an irreversible heart damage and his condition was deteriorating dramatically. Secondly I knew this man personally. He trusted us, knowing there was no other rescue left for him. And thirdly, Mr. Krawczyk was a highly self-disciplined man: he would later make sure he would meet all the requirements set for patients after heart transplant. Those were the most important reasons why he became the first patient on our recipient list. Professor Religa accepted my proposal.

Józef Krawczyk survived one week...

He was extubated, he was in good contact with us for two-three days, he also communicated with his family. We experienced great joy and hope together. We were happy that the surgery itself went well and the first few days were practically without any complications. Later, complications emerged and disease – severe liver and kidney deficiency – won against health and us. Unfortunately, he died of multiple organ dysfunction syndrome and blood clotting a few days later. Our second patient lived for a month. His condition after a week was so good that he walked the corridors and we already prepared a place for him in the nursing home in Karpacz but in the third week complications happened due to heavy infection of cytomegaloviral disease type.

You were an assistant of Professor Religa and one of his closest colleagues. What kind of boss was he?

He was competent and brave. He had great determination and conviction that he would do what Professor Moll failed to do. A characteristic feature of pioneers – also in Polish medicine – is that they are visionaries. And Professor Zbigniew Religa certainly displayed this feature. He summoned us, his workmates, to the most difficult surgeries and he helped us to grow as a team. To be able to launch the difficult heart transplant programme, followed by lungs and heart and lungs transplants, which I performed as his closest workmate, one has to be both visionary and resilient to temporary inabilities and problems. Professor Zbigniew Religa was such a man and he will remain one in our memory.

Was Professor Religa constantly looking for new challenges?

In 1985, Professor Zbigniew Religa was the initiator and leader in the field of cardiac transplant programme but after the sixth or seventh heart transplant he entrusted the programme to me. While he returned to his favourite topic – to save a sick person when no donor is available – he started to build in Zabrze ventricular assisting devices. Owing to those devices we have saved the lives of several dozens of patients until today. Whenever I see a sick person owing his or her life to such ventricular assist devices – both the first pneumatic ones made in Zabrze, and those foreign, implantable ones – I feel an internal need to express gratitude for the initiative of Professor Religa in this respect.

Why do you use the words "to rescue, provide modern treatment and give hope" when talking about the mission of the Silesian Centre?

Those noble and important words are the best illustration of the Silesian Centre of Heart Diseases in Zabrze – one of the leading cardiac and cardiac surgery hospitals for adults and children in Poland.

We are proud of 30 years of the history of our centre and its significance among the best academic hospitals in the country. But of the outmost importance is to provide to the sick our know-how, experience, professionalism, good organisation and also display empathy towards our patients.

More than 30 years have elapsed since the first successful transplant. What has changed within that time in Polish transplantology?

Heart transplants, lung transplants in adults and children, similarly to the programme of mechanical assistance for inefficient heart with the use of artificial heart ventricles, initially pneumatic, external ones and presently using implantable, axial-flow ventricular assisting devices, are all evidence of the progress that has taken place in the world, but also in Polish medicine and transplantology. We are proud that, in the last 30 years of activities, we have performed in Zabrze almost 40,000 heart surgeries in adults and children. As of today, there is not a single cardiac or cardiac surgery treatment used worldwide that is not done also in Zabrze centre. Transplantology will be always the strength of our centre and a certain speciality besides modern cardiology and cardiac surgery. ●

"I'll remember until the end of my life the first 24 hours when we saw how the transplanted heart was beating again"



AN ALMOST SECRET SURGERY



JOÃO QUEIROZ
E MELO

This specialist in cardiothoracic surgery coordinated the team that, in February 1986, performed the first heart transplant in Portugal.

Interviewed by Feed, the specialist in cardiothoracic surgery says that despite medical advances, 30 years later the surgical technique for heart transplantation “remains exactly the same”.

The operation was performed at the Santa Cruz Hospital in Lisbon, where he was a director, and also managed the Cardiothoracic Surgery Service. At a time when, as the specialist says, “cardiology and surgery were far less advanced than now”, and in which “collaboration between different specialisations was rare”, the transplant performed that year was an important achievement.

Queiroz e Melo recalls that it was Manuel Machado Macedo, a leading figure in Portuguese medicine, who brought together a group of young doctors from various specialisations and “encouraged us to do things, and gave us the authority to make decisions” – a freedom that was rare at the time. At that time, João Queiroz e Melo was working in the US. The other members of the team were also abroad and they were called to the Santa Cruz Hospital. The fact that they were working abroad explains how, moreover, “the transplant came to be carried out at that time in Portugal”. And it was also the reason the surgery was so successful. “We were completely autonomous and experienced, and everything happened very naturally. Five years earlier, we were doing surgeries that were not yet being performed in our country”.

Currently retired, the specialist vividly recalls the atmosphere on February 14, in 1986: “I usually compare a surgeon to a pilot who commands an airplane. It requires a lot of concentration. Feelings have to be put aside. There can not be any kind of self doubt”. “When a surgeon is operating he cannot have any emotions”, he says. The days before the surgery were also filled with “intense concentration”. “We knew that, from a certain moment, it was going to happen. We were ready a month earlier, but we had to wait for a donor. We were not at all anxious”.

“I usually compare a surgeon to a pilot who commands an airplane. It requires a lot of concentration. Feelings have to be put aside. When a surgeon is operating he cannot have any emotions”

The surgery, which lasted four hours, was performed under secrecy, and a code was used to identify it: “Teresa Costa”, whose initials corresponded to Transplantação Cardíaca (Heart Transplant in Portuguese). Eva Pinto, who was “about 50 years old” at the time, was the patient chosen to receive the heart. She suffered from dilated cardiomyopathy and the operation gave her over a decade more of life. It was considered a success.

Thirty years after this first transplant, some things have changed. “These surgeries have become routine in Portugal. Pre and post surgery have also changed completely. There are many more treatments to control heart rejection, that are less aggressive and allow for a much higher quality of life”. Furthermore, the specialist added, “over the years, this type of intervention has ceased to be a definitive solution, especially for younger people. There is now greater interest in delaying the transplant, while at the same time opting for other therapies.” However, there are other things that have not changed at all, such as the “surgical technique, which remains exactly the same.”

Born in Tomar in 1945, João Queiroz e Melo was a professor at the Faculty of Medical Sciences of the Universidade Nova de Lisboa and assistant director of the Health Sciences Institute of the Portuguese Catholic University, where he also taught. In 1988, João Queiroz e Melo was made a Grand Master of the Military Order of Santiago de Espada. He held management positions at the European Society of Cardiology, the Portuguese Society of Cardio-Thoracic and Vascular Surgery and the Portuguese Society of Cardiology. As a result of his research work, numerous articles have been published in international journals. ●

ALBERTO VILLEGAS HERNÁNDEZ

In Colombia, the first heart transplant occurred in December 1985, at the VID Cardio Clinic in Medellín, by cardiovascular surgeons Alberto Villegas Hernández, Mario Montoya Toro and Darío Fernández. In an interview last year with the Colombian radio station RCN, Mario Toro, current director emeritus of the clinic in the Colombian city, recalled how “beautiful” the moment was when the donor’s family authorized the transplant. On the other side was Antonio Yepes, a construction worker, who was then 40 and suffering from coronary disease. Thanks to the transplant, he survived for two more years, leading an active life. The operation, in addition to being pioneering in the country, has accelerated the development of other treatments and approaches, and has become “a good alternative for the treatment of patients with serious heart problems”, says Álvaro Quintero, coordinator of the transplant team at the VID Cardio Clinic. “After that, the team got stronger and their results improved.” In addition to being the first in Colombia, the 1985 transplant was the third in all of Latin America.

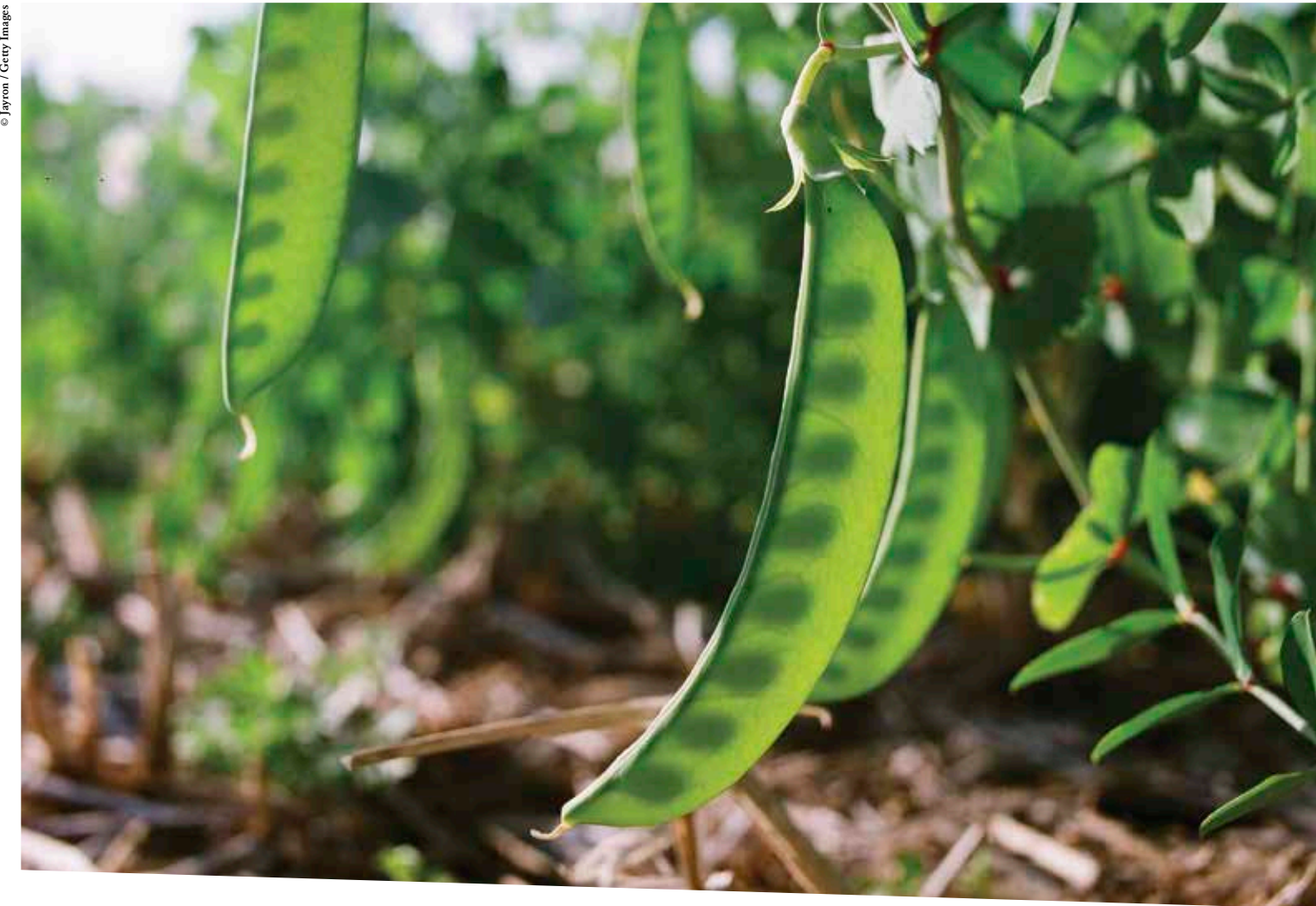


Eva Pinto, the first Portuguese patient to successfully receive a heart transplant, talks to the journalists outside the Santa Cruz Hospital, nearby Lisbon, in 1986.



BEANS

Two new species of superbeans were developed in Colombia to fight the nutritional deficiencies in the food habits of the Colombians by enhancing iron and zinc levels.



A SET

of brand new high-iron beans have been officially released in Colombia. They contain as much as 60% more iron than standard beans and are intended to address the problem of iron deficiency in the country, that affects up to 35% of children under 12, with hotspots in the Atlantic coast and the Amazon regions. “These new beans should enable farmers to grow their own nutrition more effectively and help efforts to tackle the problem of micronutrient deficiency at its core,” said Steve Beebe, leader of the CIAT - International Center for Tropical Agriculture - Bean Research Programme. Iron deficiency is the most common and widespread nutritional disorder in the world, affecting a large number of children and women in developing countries. It is also the only nutrient deficiency that is significantly prevalent in Industrialized Countries too. It affects up to 2 billion people globally – over 30% of the world’s population – according to the World Health Organization. The major health consequences include poor pregnancy outcome, impaired physical and cognitive development, increased risk of children morbidity and reduced work productivity in adults.

The new beans also contain 50% more zinc and they were developed using a method called biofortification, which uses traditional crop breeding practices to increase the levels of important nutrients in stable crops. It is the first time biofortified beans have been released in the Andean zone of Colombia. Releases of high-zinc maize and high-zinc rice are scheduled to take place in the next year. Vitamin-A cassava is also in the pipeline. ●

Iron deficiency is the most common and widespread nutritional disorder in the world

COLOMBIA’S NUTRITIONAL STATUS: A WAKE-UP CALL FOR THE COUNTRY

CLAUDIA L. ANGARITA



NUTRITIONIST AT PONTIFICIA UNIVERSIDAD JAVERIANA DIETISTA. SHE IS A FORMER PRESIDENT OF ASOCIACIÓN COLOMBIANA DE NUTRICIÓN CLÍNICA. CURRENTLY SHE WORKS AS A HEALTHCARE ADMINISTRATOR AND SHE IS THE DIRECTOR OF CENTRO COLOMBIANO DE NUTRICIÓN INTEGRAL.

IN TODAY’S

world, most countries face a significant burden of disease due to undernourishment and obesity. This problem imposes enormous demands both on governments, because of the high costs of treatments, and on individuals and families, generating higher costs to society in terms of days of disability and loss of quality of life.

Colombia is not far from this reality as we have a malnourished society. In 2010, the Colombian Institute of Family Welfare, ICBF, conducted The Survey of the Nutritional Situation in Colombia, ENSIN, with the purpose of identifying the nutritional status of the Colombian population from the ages of 0 to 64 years. They evaluated anthropometric and biochemical indicators, demographic determinants, socioeconomic factors, environmental, lifestyle, health and disease factors that may be associated with the nutritional status.

If we talk about malnutrition, from an anthropometric perspective - weight and height per age - 13.2% of Colombian children under 5 years of age presented height gain delay and 30.2% were found at risk of definitive low height. This means that over a long period of time, their nutritional requirements were not covered, to the extent that they did not have enough substrates to reach the right size for their age. From the biochemical analysis, one out of four children aged 1 have iron deficiency with a prevalence that is four times greater than that of children of 3 and 4 years of age. There is a deficiency of 24.3% in Vitamin A in children under 5 years, i.e., in every 4 children, one has deficiency of vitamin A. In this same age group, around 50 % of the children had zinc deficiency.

Another population group that was at risk of undernourishment were women of childbearing age and pregnant women. One of every 5 women of childbearing age presented iron deficiency, while one in three pregnant women between the ages of 18 and 29 also had iron deficiency. On the other hand, a quarter of women of childbearing age and 2 of every 5 pregnant women showed deficiency of vitamin B12. As for overweight and obesity, the survey found that one out of every 4 children under 5 years old and one in five children and adolescents aged 5 -17 years was overweight. In the adult population, between 18 and 65 years, one in every two Colombians was overweight. 39.8% of men and 62.0% of women had a waist circumference greater than normal, indicating increased abdominal fat and increased risk of chronic non-communicable diseases.

In the same survey, feeding practices were analyzed and showed that one in every five Colombians consume the recommended dairy servings, one in every 7 does not consume meat products on a daily basis, 1 in every 5 consume red meat, sausage or viscera daily. This may increase the prevalence of anemia, iron deficiency, zinc and vitamin B12.

One in three pregnant women between the ages of 18 and 29 had iron deficiency

One in every 4 Colombians consume an egg a day. This shows that, in Colombia, intake of protein source food is limited and this could be the reason why children do not reach their proper size and the obese have sarcopenic type obesity, i.e. they don't have the appropriate mass and muscle strength.

As for the consumption of fruits and vegetables, 1 in 3 Colombians does not eat fruit daily and 5 out of 7 Colombians between 5 and 64 years old do not eat vegetables daily. This is related to the prevalence of vitamin A, C and B vitamins.

The consumption of fast food and food with high caloric density is high. One in 4 Colombians between the ages of 5 and 64 consume fast food weekly and that number increases as the socioeconomic status rises; and one in each 5 between 5 and 64 years of age consume soda or similar drinks daily.

One of the reasons that may influence in the prevalence of obesity is the lack of physical activity: 46% of the population is inactive and men perform more physical activity than women. 62% of children and adolescents watch television or play videogames for 2 hours or more every day.

Micronutrient deficiency, not only occurs in malnutrition, but also in obesity (hidden malnutrition). This deficiency causes serious effects on human health, such as delayed growth, impaired cognitive development, low learning ability, infectious diseases, visual disorders, anemia, congenital malformations and the risk of developing chronic nontransmissible diseases such as diabetes, cancer and hypertension, among others.

In addition, malnutrition and obesity are responsible for the detriment of the economy of people because it makes them less productive. Work absenteeism and increased household spending resulting from their treatment. And it is not possible to ignore the impact on the health systems sustainability as well.

Malnutrition and obesity are responsible for the detriment of the economy of people because it makes them less productive

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ACTION TO REDUCE AND PREVENT MALNUTRITION-RELATED DEFICIENCIES

NATIONAL STRATEGY FOR PREVENTION AND CONTROL

OF MICRONUTRIENT DEFICIENCIES IN COLOMBIA
2014 – 2021

The objectives of this strategy are to prevent and reduce micronutrient deficiencies in the Colombian population, with emphasis on children under 12, pregnant women and women in childbearing age. The lines of action of the strategy are:

1. Diversification of food.
2. Strengthening priority actions: delayed umbilical cord clamping to prevent anemia, encourage breastfeeding up to 2 years of life and adequate introduction of complementary feeding and deworming.
3. Food Fortification of consumer and specific foods and home-made food micronutrient fortification.
4. Biological Biofortification of food.
5. Supplementation with micronutrients.

DIETARY GUIDELINES FOR HEALTHY EATING

The guidelines are a set of recommendations that provide guidance to the population regarding healthy food consumption, in order to promote healthy lifestyles, control deficiencies, especially iron and vitamin A, or control excesses in food consumption and reduce the risk of diet-related diseases. These guidelines were updated and compiled by the ICBF with the support of the Ministry of Health and Social Protection in 2014, for the population aged 2 years and plus.

THE FEED GUIDES FOR THE COLOMBIAN PEOPLE RECOMMEND EATING LEGUMES SUCH AS BEANS, LENTILS, CHICKPEAS

2X
A WEEK
AT LEAST

Digestive Benefits

Cardiovascular Health

Diabetes Protection

Cancer Prevention

The question that arises is why Colombians have this problem of malnutrition?

© Kiko Jimenez / Shutterstock

In conclusion, malnutrition and obesity, being totally opposite diseases are increasing the morbidity and mortality rates worldwide. In Colombia, they have increased in recent years and are generating a wake-up call for, regulatory, educational, health and agricultural governmental agencies, food industry and scientific societies.

Prevention strategies should include individual persons and their families, improve educational, employment, social and hospital setting, and should take into account risk measurement methods and nutritional diagnosis, healthy eating habits, physical activity and health. However, all these actions will be successful as long as individuals become aware that health is a heritage that should be worked.

Therefore, it should be improved the opportunity to see the specialists, develop educational programmes through health personnel, who are aware of the problem and are trained in the

field of prevention of diseases, both for the individual and for the family.

It is also important to unify the concepts of balanced and therapeutic diets, improve and redesign the food services that take care of children under 5 years, adolescents and older adults, emphasize healthy eating habits, physical activity and lifestyles that have as their final purpose the individual health and that of the whole population.

Emphasis should be placed on programs that encourage proper nutrition of women in child bearing age, pregnancy and lactation, promote exclusive breastfeeding up to 6 months of life, and stress the importance of proper introduction of complementary feeding the first two years of life. And during the first 5 years of life, it must be ensured adequate food to promote an healthy growth and development, lowering the risk of chronic non-communicable diseases in adulthood.

MADRES COMUNITARIAS



Madres Comunitarias take care of children at risk

THE Madres Comunitarias are adult women with the attitude, aptitude and time to spend caring for a group of girls and boys who are at risk. The work of the Madres Comunitarias is based on the Community Model for early childhood provided for by the Instituto Colombiano de Bienestar Familiar, ICBF, (Colombian Institute of Family Well-Being), especially for girls and boys under the age of 5 who are vulnerable and at risk. The Hogares Comunitarios de Bienestar (Community Well-Being Homes), and consequently the Madres Comunitarias, endeavour to promote the boys' and girls' development, through active participation as a team, which includes the family, and by seeking to guarantee their rights. Equally, they aim to build pedagogical proposals that generate opportunities for expression and communication with others. This is all carried out as part of the boys' and girls' daily lives, generating a rich environment encouraging full early childhood development.



They aim to build pedagogical proposals that generate opportunities for expression and communication with others, as well as to create a positive environment for a healthy development

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HOW IT ALL BEGAN ?

It all began with the Community Well-Being Homes, created as a comprehensive, widespread strategy for supplementary food, nutritional control, and the individual and social protection and development of more vulnerable boys and girls from social sectors lacking basic services in the urban areas and rural centres in Colombia. The Centros Comunitarios para la Infancia (Community Childhood Centres) had been in operation since 1972 and in 1974 the ICBF created the Centros de Atención Integral al Preescolar (Full Pre-school Care Centres), now called Hogares Infantiles (Children's Homes), which were run by this entity. Thanks to research carried out with the support of UNICEF, the "Casas Vecinales" (Neighbourhood Houses) began operating, the families playing a bigger part. Later, in 1979, the parents and neighbours took on the management of the Children's Homes in recognition of their educational role. Since then, the Community Mothers and Fathers have been linked to charitable and community work in educating and developing minors. The 1989 regulations of the Community Well-Being Homes also recognise voluntary women called "Madres Comunitarias" (Community Mothers), who join together and with the families to take care of the beneficiaries. Currently, the Community Well-Being Homes work in a specialised manner according to the following schemes:

1. TRADITIONAL HOMES: WHEN A COMMUNITY MOTHER OPENS A SPACE WITHIN HER HOME TO CARE FOR 12 TO 14 CHILDREN

2. GROUPED HOMES: WHEN 4 TRADITIONAL HOMES OPERATE WITHIN THE SAME SPACE

3. FULL HOMES: WHEN A COMMUNITY MOTHER OPENS A SPACE WITHIN HER HOME TO CARE FOR 12 TO 14 CHILDREN WITH AN INTER-DISCIPLINARY SUPPORT TEAM

4. FAMI - FAMILIA, MUJER E INFANCIA: WHICH TAKE CARE OF PREGNANT AND NURSING WOMEN AND CHILDREN UP TO THE AGE OF TWO

CHILDREN

WHAT THE COMMUNITY WELL-BEING HOMES PROGRAMME IS DOING TO PREVENT NUTRITIONAL DEFICIENCIES

The programme aims to supply the girls and boys with 70% of their daily energy and nutrient requirements. This contribution is within the parameters set out by international bodies and approved for the Colombian population. Likewise, the portions are established to supply the necessary quantities of calories, proteins, fat, carbohydrates, vitamins and minerals that contribute towards proper body functioning, enabling daily activities related to learning to be performed and promoting the growth and development of organs and tissues.



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Children and pregnant women supported by this programme

700,000

The programme aims to supply the girls and boys with 70% of their daily energy and nutrient requirements

NUTRITION GUIDELINES

The programme has a set of food standard guidelines for children that are drawn up according to the characteristics of the population under care and the established nutritional intake percentages. These guidelines are defined by group, measures, quantities and frequencies, for consumption at once or at various times, adjusted to the calorie and nutrient requirements of the girls and boys.

HOW JERÓNIMO MARTINS IS SUPPORTING MADRES COMUNITARIAS

Within the framework of the Memorandum of Understanding celebrated between Jerónimo Martins Colombia and ICBF, the main challenge is finding the opportunity to benefit the Community Well-Being Homes in the regions where the Ara chain of stores operates. Currently, this partnership is carried out in the macro-regions of the country, benefiting more than 260 Community Well-Being Homes in the departments of Quindío, Caldas, Risaralda, Valle del Cauca, Atlántico, Bolívar and Magdalena. The Madres Comunitarias-Jerónimo Martins alliance has encouraged the consumption of banana, papaya, mango, eggs, yoghurt and milk among more than 3,600 children and has strengthened the nutritional intake of each of the Community Well-Being Homes within their scope. Equally, focus has been placed on reaching children with a nutritional deficiency, aiming to offer a better quality of life to the boys and girls who need it the most.

*On July 10, 2016, Portugal
won the UEFA European
Championship, bringing
the nation to ecstasy.*

EURO HEROES

THE RISING HEARTBEAT OF A NATION



THE OTHER FOOTBALL-BOOTED NATION



Portugal's Cristiano Ronaldo (front) and his teammates pose for a group photo after winning the 2016 UEFA European Football Championship final match against France at Stade de France. The Portuguese team won the game by 1-0 and became European Champion for the first time in history.



CARLOS DANIEL

JOURNALIST AT RTP - PUBLIC PORTUGUESE TELEVISION CHANNEL

A FEW days ago I was sitting on the open-air terrace of a busy Lisbon café, having coffee with the Portuguese national football team manager, Fernando Santos. We were talking about football – what else? But every couple of minutes someone would interrupt us to greet the new national hero or take the inevitable selfie. And every time we would hear the words “thank you”. “Thank you for what you did for us,” they said time and again, in front of my very eyes, young and old, men and women. The entire country had been waiting forever for this moment of glory. The great Brazilian columnist Nelson Rodrigues dubbed his native land a “football-booted nation”; and this year, on the July 10, in Paris, Portugal became one too.

Portugal had been waiting for this victory for precisely 60 years, ever since Eusébio knocked Pelé off his throne in the 1966 World Cup, putting the red jerseys just a few days away from becoming world champions. But Portugal lost to England in the semi-final and the nation had been waiting ever since to avenge that defeat in London and, especially, the tears Eusébio shed on the pitch at the end of the game. Years later, it was Cristiano Ronaldo’s turn to weep, after Portugal lost to Greece in the final of the European Cup in Lisbon. It was like a fado, a truly Portuguese lament, and even more so considering the various defeats in semi-finals – and almost all to the same opponent: France – in 1984, 2000 and 2006. Whenever the prospect of a grand triumph poked its head over the horizon, there were the French waiting in the wings – the ultimate *bête noire*.

The words “play like never before but lose like always” would be heard on everyone’s lips and the well-known Portuguese comedian Herman José eternalised a phrase to be used in times of defeat, when all that remains is to keep one’s dignity intact: it was, “leave with your head held high, like the national team”. But that joke makes no sense any more. Not only can the Portuguese national football team hold its head up high, but it has also finally raised a trophy aloft. A country that adores football and devotes so much of its time to the sport – in café conversations and on endless television programmes – has finally seen its passion rewarded; a country with less than eleven million inhabitants has earned the right to be “European Champion” for the next four years. It will be quite some time before the true dimension of the feat can be grasped, but the title that Eusébio and Coluna, Chalana and Futre, Rui Costa and Figo were never able to call their own, finally belongs to Portugal. And to make it a truly perfect occasion, it happened before the eyes of the French, in their own capital city of Paris; a historical payoff worthy of the silver screen.

It is often said that football is given far too much importance in Portugal; perhaps this is due to the fact that the young democracy is still lagging behind culturally and has not yet had time to catch up and form more informed and cultured elites or alternative leisure habits. And perhaps, too, because the country has no other idols who are as grand in stature as Ronaldo or Mourinho, and no worldwide superstars in the arts or performing arts, thus reinforcing the social centrality of the game. Nevertheless, football is phenomenally successful all around the globe; it is unrivalled in its capacity to bring together people from all different levels of society and is an integral part of the very identity of its millions of fans. Not so very long ago, when the first Brazilian astronaut boarded a rocket to space, he took with him his country’s flag and its national football shirt. João Ubaldo Ribeiro wrote in his tropical Portuguese, “When you win at football, you’re the best.”

In Portugal, many people sign their newborns up for membership of their favourite club even before they register them as citizens of the country. And others are utterly determined that, when they die, they will go to their final resting place shrouded in the flag that symbolises their life’s longest-lasting passion. Whatever else you swap, you never swap clubs – or so they say. And it is in the victories of the national team or the best club teams that the Portuguese – several million of whom live beyond the country’s borders – find their main source of national pride. Football generates a sense of belonging that even transcends national identity, since no other phenomenon brings together simultaneously Angolans, Mozambicans, Santomeans, Guineans, Cape Verdeans, a number of Brazilians and almost all Timorese in the extended nation that is the Portuguese language.

Eder of Portugal scores the opening goal during the UEFA EURO 2016 Final match between Portugal and France at Stade de France on July 10, 2016 in Paris, France.



Perhaps the reason for the game’s success is the uniqueness of being played with those least noble limbs – the lower ones – or because of the widely varying tactics that result from having so many players on such a spacious pitch. Add to the mix the emotional involvement caused by the game, its unpredictable nature, the physical contact and the alternating attack and defence; and then there is the fact that it reflects life in society – the competition and division of tasks, the supposed meritocracy, and the importance of luck. In this game, as in life itself, people are attracted to those who are successful and tend to shy away from failure. And in this respect, do not disdain the pleasure one feels at an opponent’s defeat, which the Germans call *schadenfreude*, and which portrays every fan of this universal game. The historical relevance of the phenomenon has made it the driving force behind a variety of attitudes for more than a century: religious antagonism, separatist claims, regional assertion, ideological instrumentalisation or simple political collage. However, the most powerful have not always been successful in wielding it as a tool. In the 1980s, the working classes in the poor city of Naples took their revenge against the powerful North on Italy’s football fields, firmly grasping their “Neapolitan pride” in the local team led by a man who is still a legend thirty years on: Maradona.

In the 2004 European Football Championship anthem, Canadian singer Nelly Furtado, who has Portuguese roots, sang “Como uma força” (“Like a force”), the inspiring song that heralded the first major international football championship to be held in Portugal. The rhythm of the song illustrated the mobilisation of the country and a wave of patriotic fervour that, in recent history, can only find a parallel in the days of the April 1974 revolution. Portugal missed the title by a hair’s breadth and many believed there would never again be another opportunity like this one. It took 12 years. Cristiano Ronaldo once again shed tears: for the injury that took him out of the final before full time, and when Eder – the striker who rarely struck home – scored the immortal winning goal. And so another football-booted nation was born in the great nation that is the Portuguese language. ●

THE PULSE OF EARTH

"OUR

solid earth, apparently so stable, inert and finished, is changing, mobile and still evolving... And the secret of it all – the secret of the earthquake, the secret of the “temple of fire,” the secret of the highland – is in the heart of the earth, forever invisible to the human eyes. These words that Canadian geologist R.A. Daly wrote in 1926 are still very much relevant. According to Victor Hugo Forjaz, a renowned volcanologist – with expertise in astrophysics, cartography and hydrogeology – working at the Volcanological and Geothermal Observatory in Azores, the planet Earth is “young and it’s in expansion”. From an astrophysics’ point of view our planet is still in its infancy, only 4 billion years old. At the time of death from a geological perspective, it will be 50 billion years old. Its core, currently at 5000° degrees is cooling off 100° degrees every billion years. So, by the time the 50-billion-year mark comes around, the planet will be completely cold. Besides, as Dutch geologist J.H.F. Umbgrove wrote: “as the Earth disposes of the youthful power to withstand the destructive work of denudation I cannot detect any symptoms of senility in the pulse of the Earth.”

Therefore, is there a way to identify what exactly can be recognized as the *pulse of the earth*? Answering this question became challenging because in trying to find the answer it quickly became apparent that this Earthly pulse may actually differ even among the various disciplines under the Geophysics umbrella, the subject of natural science that studies Earth’s internal structure, composition and shape, gravitational and magnetic fields, and dynamics, which is what many consider to be the key to Earth’s heartbeat.

Some scientists consider the planet’s pulse to be linked to its magnetic field, specifically when taking into account the Schumann’s resonance; others consider it to be connected with the geodynamics of Earth, specifically volcanism, given the fact that it’s the study of plate tectonics, volcanoes and magma; some to the gravitational field, which, in turn, affects Earth’s tides, a phenomenon that can be deemed as the regular heartbeat of the world. But even geothermal energy can be thought of as the pulsation of our planet.

Tides are a way of identifying this pulse. The natural phenomenon of gravity causes the ocean’s tides: the systematic rise and fall of sea levels, a result of the combined forces exerted by both the moon and sun, as well as the Earth’s rotation. Renowned ecologist H. H. Shugart writes, in “Foundations of the Earth” (2014), that tides “are the most obvious pulsations of the seas, its heartbeats”. This way, it produces a regular, constant ebb and flow of tides can be considered as Earth’s own steady, unfaltering heartbeat. However, Victor Hugo Forjaz reveals that there are also earth tides, a “tide of what’s solid”, that can only be measured in nano-units. This “is a kind of pulsation” that can also “affect the magnetic field of our planet because iron, one of the components of magma that creates this field, is oriented according to the moon – an example of what Umbgrove calls “the pulse of the deep-seated forces”. This magnetic field extends from the Earth’s core into outer space. The magnetic field and electric currents that envelop our planet, invisible to our eyes, create intricate forces that affect life on Earth. It’s like an enormous bubble, protecting the planet from cosmic radiation and electrically charged atomic particles, that is pulsating because it’s in a permanent state of flux. A more specific set of electromagnetic waves that surround the Earth was identified by German physicist W.O. Schumann – now known as Schumann’s Resonance.

According to NASA, it produces a recurring atmospheric heartbeat. Inevitably, however, Victor Hugo Forjaz argues that “the most identifiable phenomena which form the pulse of the Earth is connected to seismology, volcanology and tectonic plates”, such as the crust and upper mantle, such as permanent volcanoes, earthquakes and mountain building – “the pulsation of folding and mountain building”. Furthermore, Forjaz claims that, “if we think

about tectonic activity as the pulse of the earth”, then we would be living a period of “relative calm” that may very well “correspond to a cycle whereas in half a million years we’ll go through another period of great plate activity”.

Forjaz also believes that geothermal energy can also be a possible measure of the Earth’s heartbeat or pulse, “both due to medicinal thermalism and new or renewable sources of energy. This resource has as a source – the so-called hot spots – that pulsate magma periodically – at 15 million year intervals, another potential heartbeat. These “hot spots” are located at tectonic plate boundaries, which are also seismically active. There is also a supply of balmier heat at shallower depths effectively anywhere on the planet, a naturally occurring “hydrothermal convection” system: an authentic circulatory system.

In terms of identifying Earth’s ultimate heart, the volcanologist doesn’t hesitate to nominate the planet’s mantle because it pulsates and moves in a very similar way to that of a human heart.

PORTUGAL

RESTING BETWEEN PLATES

PORTUGAL

rests near the intersection between the major Eurasian and African plates, however the plate boundary of Southern Iberia is not properly defined. A new study, helmed by Marc-Andre Gutscher, a researcher for the European Institute for Marnie Studies, notes that Portugal’s 1755 earthquake was the result of subduction, where the oceanic lithosphere (outer, solid part) submerged under the continental lithosphere. This subduction is still active but its consequences won’t be felt for a long time (1,000 to 2,000 years). Additionally, the Azores and Madeira archipelagos have a long history of volcanism, with the Serreta volcano as the one with the most recent activity (2001).



A digital illustration of map showing the Earth’s tectonic plates, specifically the boundaries between plates beneath the Iberia Peninsula

© Dorling Kindersley / Getty Images



White Hot

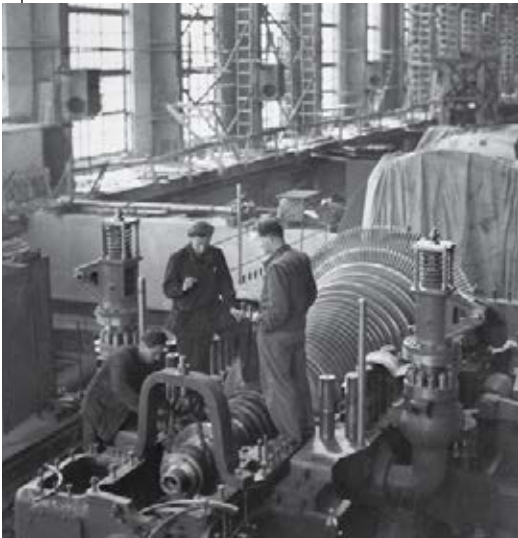
Aerial view of Nevado del Tolima and Nevado del Ruiz volcano showing a plume of smoke and ashes on November 21, 2016 in Colombia.

COLOMBIA

A CARIBBEAN “HOT SPOT”

COLOMBIA'S emerged territory covers a vast area of the South American plate. At the same time, there is submerged Colombian territory that lies in the Caribbean and the Nazca plates, all very close together. As a result of being in a “hot spot” location, Colombia experiences tectonic movement and frequent seismic activity. One of Colombia’s strongest and worst earthquakes was shared with Ecuador – along the line between the Nazca Plate and the South American Plate – in January 1906. The 8.8 Richter magnitude was catastrophic and it triggered a destructive tsunami that caused, at least, 500 casualties on the Colombian coast, near Esmeraldas.

Engineers setting up the electric-thermal plant of Zeran in Warsaw, which supplies the city, on November 4, 1964.



These “hot spots”, located at tectonic plate boundaries, are also seismically active.

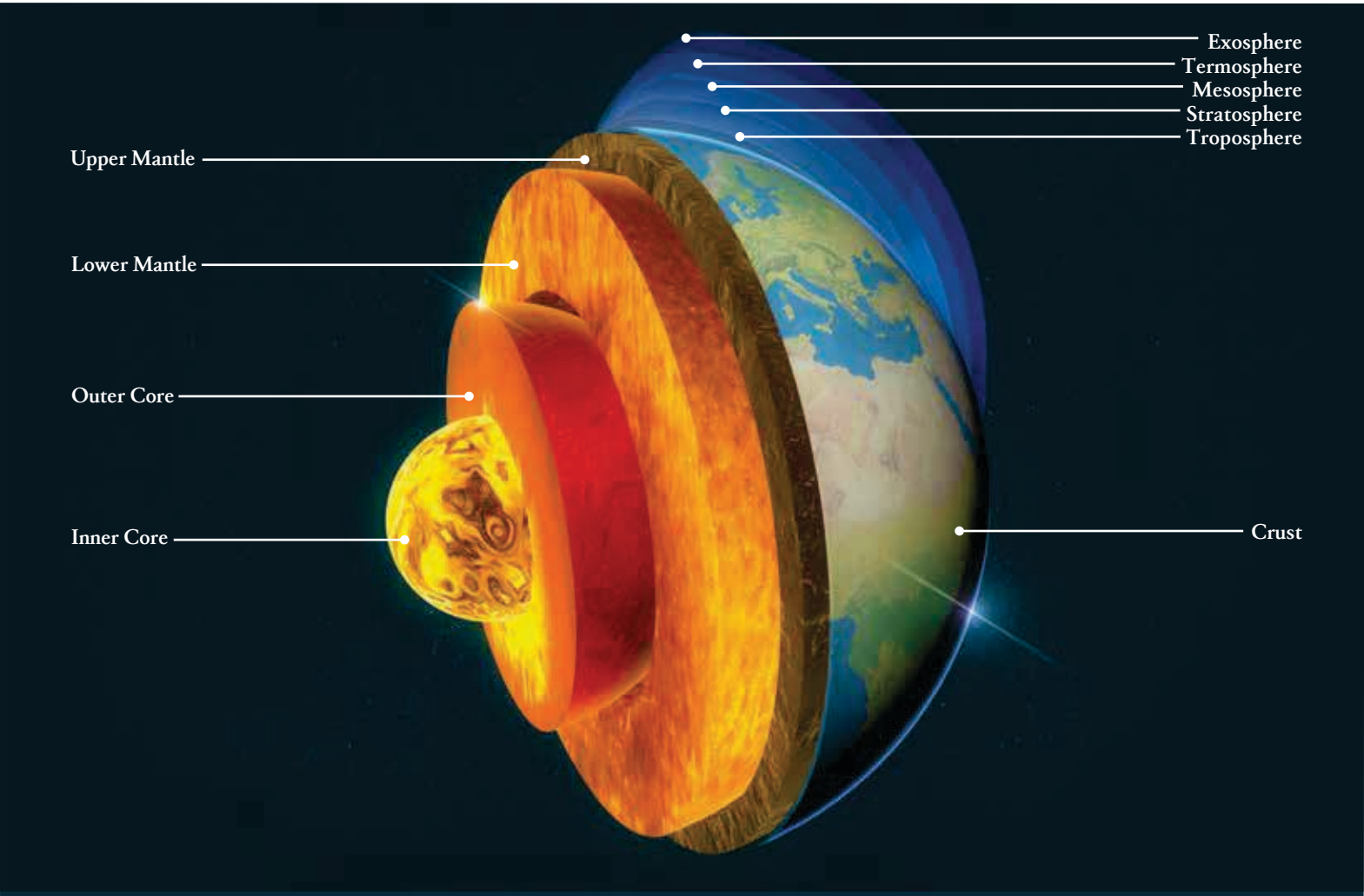
POLAND

GEOTHERMAL POTENTIAL

POLAND, which also has three volcanoes (Ostrzyca, Grodczyn, Wilcza Góra) - although extinct - has significant resources of geothermal energy. The results of research and estimations have been able to prove that geothermal energy has the greatest potential in this country when it comes to renewable sources. In fact, Poland has one of the largest low-enthalpy (resources that typically present temperatures below 150 °C) geothermal potentials in Europe, with temperatures ranging from 30° to 130° at depths of 1 to 4 km. There are seven geothermal plants: three in the Podhale region (Zakopane, Bukowina Tatrzańska and Bańska Niżna), in Stargard Szczeciński and Pырzyce (both in the northwest) and in Mszczonów and Uniejow, both in central Poland.

The structure of the Earth

This image shows the structure of Earth, dividing its layers into sections, from the core to the atmosphere. Elements of this image are provided by NASA





WORLD YOUTH DAY

MILLIONS OF HEARTS PULSING TO THE SAME BEAT

Prayer Vigil

Pope Francis's address at the World Youth Day's Prayer Vigil called upon 1.6 million young people to leave a mark on history: "So today, my friends, Jesus is inviting you, calling you, to leave your mark on life, to leave a mark on history, your own and that of many others as well."

THE SEVEN

days of the World Youth Days took place from 26 to 31 July in Krakow and Brzegi (near Wieliczka), in Poland. Millions of young people from 187 countries round the world came together as one community under the fraternity of the Catholic Church. This successful venture was also followed by more than 60% of Poles, who accompanied the path of Pope Francis during his visit to this Event. The founder and first host of the World Youth Day was the Polish Pope John Paul II, who brought together an immense tide of young people to commemorate their Catholic fraternity in cities such as Rome (1984, 1985, 2000), Buenos Aires (1987), Santiago de Compostela (1989), Czestochowa (1991), Denver (1993), Manila (1995), Paris (1997) and Toronto (2002). After his death, Pope Benedict XVI continued and fought for the continuation of this dialogue between the church and devout young people of the present. He hosted meetings in Cologne (2005), Sydney (2008) and Madrid (2011). In July 2013, it was the newly appointed Pope Francis who met the Catholic youth in Rio de Janeiro.

This year, the World Youth Event is also celebrating the 1050th anniversary of the (Catholic) Baptism of Poland, as signalled by the personal baptism of Mieszko I, the first Christian ruler of the Polish state.

The event was divided into two main parts: "Days in the Dioceses", in which the young people visited the territory of the country organizing the event; and the "Main Events", involving a period of one week in the main organizing city. The participation of the Pope, the enthusiasm of young people and the good organization of the event contributed to this Event exceeding the most optimistic expectations. In a statement to KAI, the Polish Catholic News Agency, the spokesperson for the Polish Episcopal Conference, Father Pawet Rytel-Andrianik, stated that it was the first time that the Event had welcomed young people from almost every country in the world. The preparation which was undertaken – lasting many months to make the atmosphere friendly, hospitable and safe - contributed to numerous participants pointing out that the Misericordiae Campus in Brzegi had the

2 million visiting pilgrims from all over the world gathered in Poland

largest and best prepared infrastructure in the history of the World Youth Day.

A joint effort was made to ensure that sufficient transportation was provided to cover the increased volume of users and travellers during the Event. During these days, Krakow airport increased its capacity to support an additional 208 aviation operations, and its airport services - from July 19 to August 8 - were used by approximately 40 thousand passengers (pilgrims). At the same time, volunteer workers from Poland, Slovakia, Lithuania, Ukraine, Canada, Germany, Italy, Romania, Malaysia, Croatia and Vietnam worked in the airport. By land, 1.1 million pilgrims used Polish trains, and this was the biggest challenge faced (and overcome) by Polish railways in the last 25 years. Passengers were able to use almost 2.6 thousand regular trains and an additional 398 special trains, which had been reserved by various dioceses. The 2 million visiting pilgrims were transported daily by 250 trams and 580 buses, and 1011 and 1054 lines were added, respectively, for the special transport of passengers. ►



Security for the participants of the World Youth Days was ensured by the Polish authorities. At the height of the event, the security of the central events was provided by more than 20,000 police officers, 830 agents of the Government Security Bureau, along with the work of numerous border agents, customs officials, railway staff, military police and firefighters who helped ensure the events ran in the best possible manner. As for the medical safety of pilgrims, this was provided by a total of 37 paramedic delegates to ensure the welfare of the participants during the Event.

“POLAND TASTES GOOD”

During the World Youth Days, the Ministry of Agriculture and Rural Development and the Agriculture Market Agency carried out a promotional campaign to introduce participants to the best Polish products and to promote Poland during the Days, and use this event as an international platform. Using the slogan “Poland tastes good”, 40,000 bottles of apple juice, 8 tonnes of apples, 50 000 units of smoked sausages, sliced carrots, strawberry yoghurt and bottled mineral water were distributed. According to the Ministry, the pilgrims were delighted with the good Polish food, as well as the multimedia presentation about Polish agriculture and hospitality, and indicated they would visit the country soon. This promotional event took place on the steps of Wawel Hill in Krakow, where films, animations and Polish recipes were presented, and a small orchard was even planted to help the visitors relax.

Biedronka sponsored the media center for the duration of World Youth Day providing food and beverages



© Anna Wład / NurPhoto / Getty Images

A view of pilgrims at the Adam Mickiewicz monument in Krakow's main square ahead of the official opening Mass of the World Youth Day 2016, on July 26

BIEDRONKA JOINS THE FESTIVITIES

On the occasion of these World Youth Days, Biedronka stores in Krakow were open, all day and all night, and it was also possible to pay in Euros. In addition, Biedronka prepared a special promotion for tourists, which included regional and seasonal products.

From 25 July, 10 Biedronka stores were open all day and night. On the weekend of 30 to 31 July, a total of 20 chain stores were permanently available to customers. At the same time, and for the convenience of tourists, drinks were sold in tents alongside 3 stores. On those days, customers were given maps of the city (showing the location of Biedronka stores and their opening hours).

The World Youth Days also provided an opportunity to present Polish and local products to its participants. For the residents of Krakow, Biedronka prepared a supply of food and non-food items for daily use at attractive prices. Biedronka also provided pilgrims with candles and lanterns with the logo of the Event. In cooperation with Caritas in the Krakow Diocese, Biedronka also provided “Source” natural mineral water. A portion of the sales of this product was allocated to projects under development by the archdiocese, including the completion of the construction of a Misericordiae Campus for the disabled and elderly in Brzegi. ●

The WYD provided an opportunity to present Polish products to the participants

The environment was “magical and welcoming”

Portuguese group of scouts, from clan 57 and from the Galileo Tribe, at the World Youth Days

The Portuguese scouts had a wonderful time getting to know Krakow and Polish culture



PORTUGUESE SCOUTS AT THE WORLD YOUTH DAYS

The trip of the Portuguese group of scouts, from clan 57 and from the Galileo Tribe, to the World Youth Day in Krakow, was “powered by” Jerónimo Martins, that provided the opportunity to participate in an experience which they feel will “mark them for the rest of [their] lives”. Thankful for the “unique opportunity” granted by Jerónimo Martins, the report they made of the meeting is full of feelings of “a great hospitable and cheerful spirit”. These scouts were involved in numerous activities, including a visit to the Wieliczka salt mines, “one of the biggest attractions in Krakow” and “the only mining site in the world which has been operating since the Middle Ages, with a size of 300 km and a depth of 327 m”. They also attended the opening Mass, full of young people ready to welcome the Pope. They visited Auschwitz, attended the reception of the Pope in Blonia and watched him arrive by tram, and visited the shrine of Pope John Paul II (of whom “there are 80 statues in the city of Krakow”). There was a vigil in the Field of Mercy and at end the Sending out Mass and the Eucharist. The environment was experienced as being “magical and welcoming”.

PORTUGUESE CONTINGENCY

LUSO PARTY

On 27 July, a meeting was held for young people from Portugal, organized by the Portuguese bishops at the ICE Krakow Congress Centre during the World Youth Days. This was an event organized for 2,500 Portuguese, and used two rooms, an auditorium and a theatre. While the events were taking place in one room, they were transmitted live to the other - and these events included two concerts, with one of them, the highlight of the event, being a fado concert.

Traffic movement during the Days was restricted, and to provide for an efficient organization, passes were purchased so that the entire staff was able to move around Krakow. A special identification was issued to authorize participants to enter the venue. This turned out to be a success: all the facilities were found on time as well as the installations necessary for the smooth running of the event. In the end, the satisfaction and gratitude of the bishops and young people was the greatest reward.



BOOKshelf

BOOKS FROM AROUND THE WORLD

The following list is comprised of books that relate to the various topics explored throughout this issue. It provides an entry point for readers that may want to further examine these themes through handpicked selections that promise to enrich worldviews.

1.

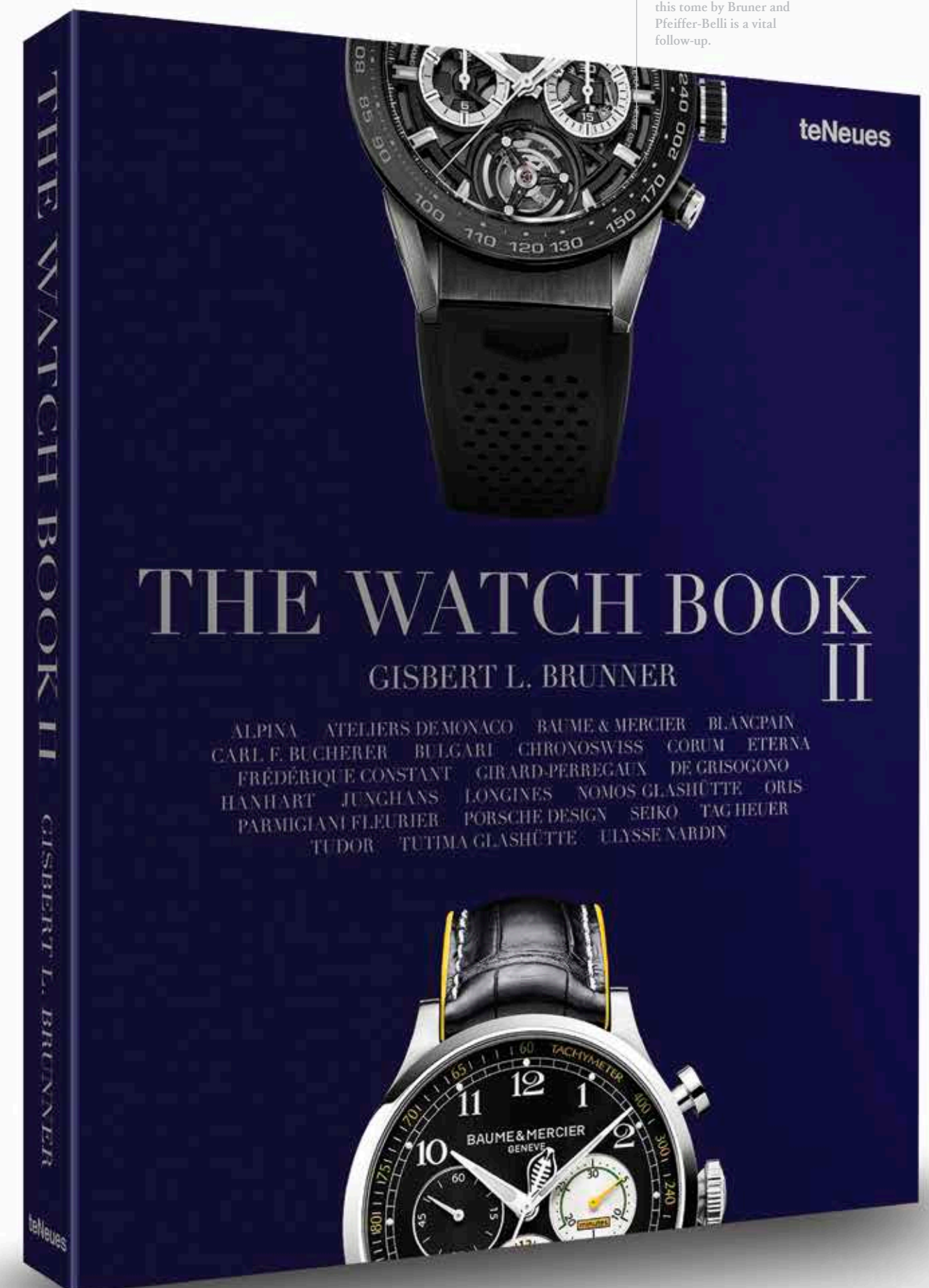
THE WATCH BOOK

The craftsmanship of the chronograph

“WATCH-journalist and writers Gisbert L. Brunner and Christian Pfeiffer-Belli pen an superbly illustrated and documented tome regarding the most vital names when it comes to precision timekeeping devices in the top-end category. The authors consider the wristwatch – a subject they have delved before with “Wristwatches” (2014), an illustrated portrait of popular brand watches – the perfect

combination of elegance and function that blends mechanics, craftsmanship and luxurious materials beautifully. They begin by discussing the meaning of time and timekeeping, then the biographies of upwards of 18 premium manufacturers, and, finally, they explore the breakthroughs engineered by these companies that led them to the top of the European watch-making industry.

After feasting our eyes with the beautiful and iconic images of timekeeping devices in “Art of Pulse” (page 32), this tome by Bruner and Pfeiffer-Belli is a vital follow-up.



BOOKshelf

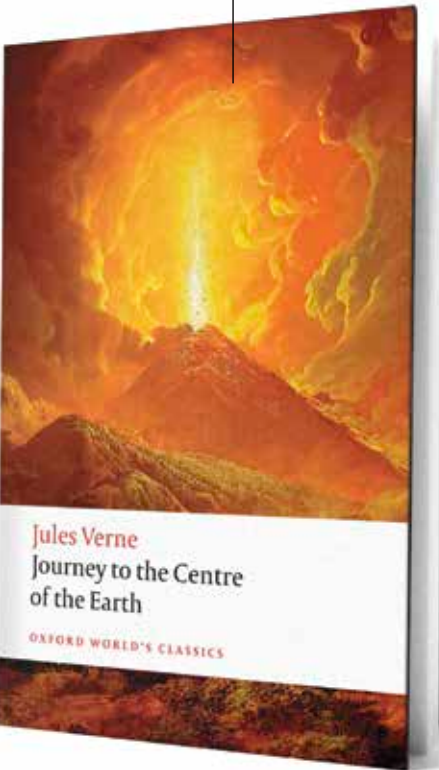
BOOKS FROM AROUND THE WORLD

3.

JOURNEY TO THE CENTRE OF THE EARTH

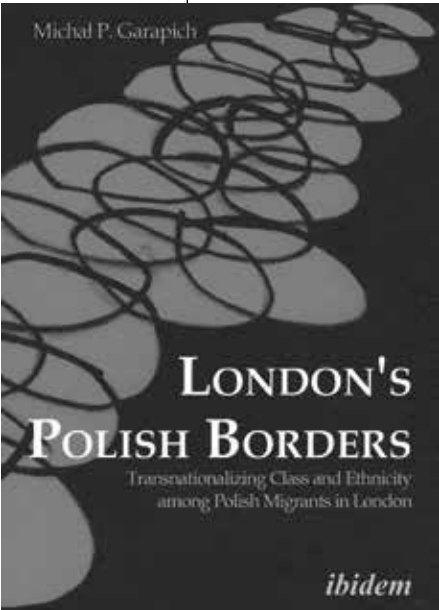
There have been several references in pop culture to expeditions the heart of Earth, its core. The most famous is Jules Verne's science fiction tale "Journey to the Centre of the Earth" (1864), a book who follows the story of Otto Lidenbrock, a German professor who believes volcanoes are connected by a tube that goes through the center of the Earth. Lidenbrock, along with his nephew Alex find a mysterious note by alchemist Arne Saknussemm that claims he has found a passage to the center of the Earth. They eventually embark on a journey with the guide Hans and descend the Icelandic volcano Snæfellsjökull, encountering exotic and prehistoric animals and creatures in a fantastic adventure that ends up at the Italian volcano Stromboli. The French novelist Jules Gabriel Verne became known for his novels that depicted adventures that heavily influenced the literary genre of science fiction. He altered his path by quitting work as a lawyer and starting to write for magazines and for the stage. Some of his most notable are "Twenty Thousand Leagues Under the Sea" (1870), and "Around the World in Eighty Days" (1873).

As a complementary reading after the article "The Pulse of Earth" (page 118), Jules Verne's classic tale depicting an adventure to the core of the planet Earth couldn't be a more suitable choice



2.

Following the section concerned with the effects of the Brexit vote in the UK, (page 78) this book marks an important bridge between Polish and British culture, while addressing the immigrant issue that is so centrally connected to Brexit.



LONDON'S POLISH BORDERS

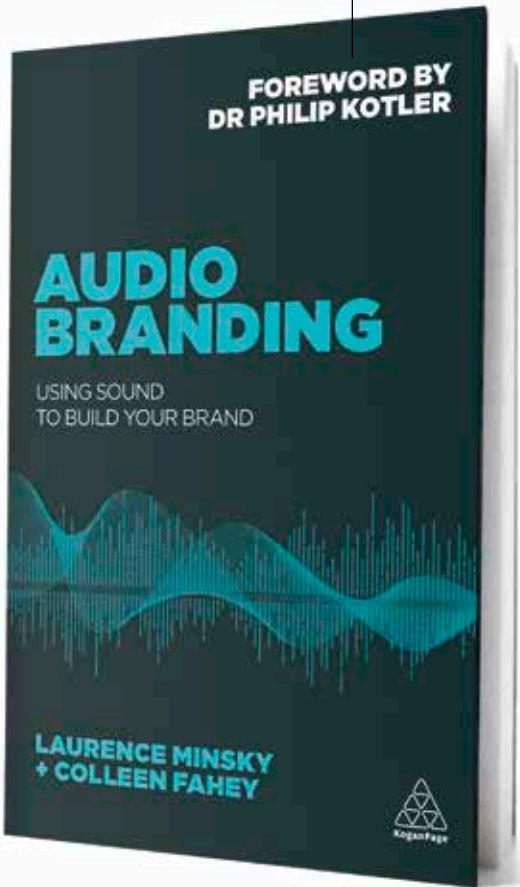
Transnationalizing Class and Ethnicity Among Polish Migrants in London

A Senior Lecturer at Department Social Sciences at the University of Roehampton and a Polish immigrant whose family still remembers war, Michal P. Garapich investigates anthropology, migration to urban centers, homelessness and resistance. Garapich explores the significant impact of the Polish immigrant community, the second largest group in the United Kingdom – seen by how well-established of an icon is the figure of the Polish plumber or builder. This anthropological study takes into account the interactions between the Polish community and the society the host country, never isolating each experience. The book's ethnographic research, undertaken for a decade, focuses on discursive actions, policies, family connections, transnational networks, and political engagement of the diaspora.

AUDIO BRANDING

Using Sound to Build Your Brand

This combination between marketing and music has been explored by the article on Miguel de Narváez (page 74). For further examination on this topic, read Laurence Minsk and Colleen Fahey's book on audio branding

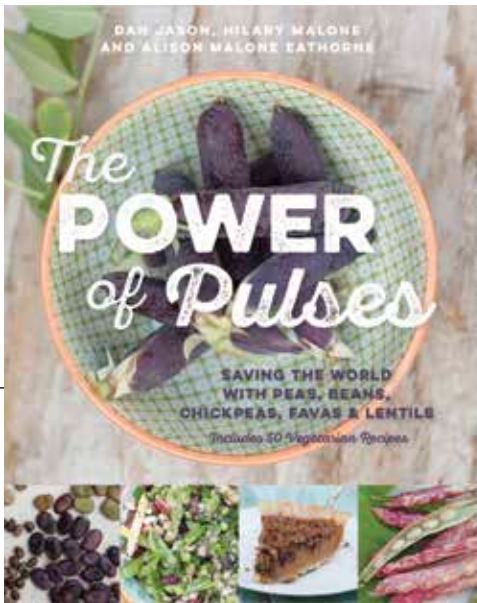


The objective behind this book is to offer its readers an in-depth overview of the world of audio branding, focusing on questions such as what it is, what is the importance of this field and what are the ways that it can be used in order to boost a brand. It covers everything from the sounds made by an app, to music played in-store, to the noise a key makes when inserted into an ignition. All these elements form compelling audio language that enriches a brand's identity. Within this book, you'll find practical insight into this burgeoning subject of marketing that's supported by extensive research, which includes real-world cases: such as Peugeot and Michelin. Associate Professor at Columbia College Chicago, Laurence Minsk is an award-winning copywriter and marketer, whose extensive professional marketing experience is coupled with his extensive academic background. US Managing Director at Sixieme Son Colleen Fahey is a veteran creative executive, with expertise in branding and marketing. The two are both authors that have contributed to the development of this marketing field.

THE POWER OF PULSES

Saving the World with Peas, Beans, Chickpeas, Favas and Lentils

This book comes from a desire to place pulses in a more prominent position, as an alternative to the overlooked role it has played in people's nutritional habits, especially for those who are dedicated to increasing self-reliance and supporting locally available food sources. Pulses not only are incredibly versatile in the kitchen, but they are also rich in fiber, vitamin B, as well as being gluten-free and unusually low on the glycemic index. These factors contribute to overall good health and help to reduce the risk of diabetes, heart disease and other chronic illnesses. "The Power of Pulses" was written in concomitance by Dan Jason, owner of Salt Spring Seeds; Hillary Malone, co-owner of Sea Salt Food Company; and her sister Alison Malone Eathorne, who also co-owns the company and is a travel and food writer. Dan gave instructions on how home gardeners can grow and store their own beans, peas, chickpeas, favas and lentils; while Hillary and Alison worked with him through the creation of 50 vegetarian recipes featuring inventive uses for the garden's goods.



This book is Feed's suggestion to deepen knowledge regarding the nutritional value of pulses addressed throughout our the "Slow Food" section (page 64)

SPEEDING HEART BEAT



*Three Jerónimo Martins employees
guide us through their favorite
extreme sports and the ways
they experience adrenaline.*

FACING

natures's challenges

FRANCISCA Pereira dos Santos started surfing when she was 12 years old and her older sister asked her “to go with her for a surf lesson”, to which she “naturally said yes”. Naturally because, ever since the age of 8, Francisca has been a big fan of sports activities such as “basketball, swimming, gymnastics and roller skating”, the latter which she did between classes. Nowadays, she surfs two or three times a week, usually in Costa da Caparica and Ericeira. She considers surf to be different than other sports because of the connection to the sea and “the adrenaline of being exposed to nature’s challenges”. And because you “cannot control nature”, the ocean can “get scary and challenging”, but Francisca loves to push her own limits: “you have to adapt and face it”, which brings her “pure excitement”. Surfing can demand a lot physically resulting in a pretty complete sport. The best feeling in the world, in Francisca’s mind, is to surf because it’s just “you, your friends and the sea”, as well as the natural feeling of being “fully connected to nature”. While no other sport may give her quite the same sensation of feeling “alive and younger”, Francisca would like to try snowboarding in the future.

© Ricardo Bravo

**FRANCISCA
SANTOS**



AGE
27 YEARS OLD
POSITION
**CATEGORY MANAGER
AT PINGO DOCE**
CURRENT CITY
LISBON, PORTUGAL

*“You cannot
control
nature but
facing it
is pure
excitement”*

RIPPING THE SAVANNAH

*Tulio bikes
through
obstacles and
challenges
to overcome
all barriers*

**TULIO
JIMENEZ P.**



AGE
32 YEARS OLD
POSITION
PRIVATE LABEL MANAGER
LIVING IN
BOGOTA, COLOMBIA

TULIO

has practiced enduro, a form of motorcycle sport that is run on courses off-road, for four years. Because this sport implies obstacles and challenges, Tulio practices around the “savannah of Bogota, Guatanita, Villa de Leyva, Neusa, la Calera, etc.”. The soft spot for the sport comes from childhood because his father “always had one”. Tulio still remembers sitting “in front of him on the bike” and “doing a day’s ride around the farm”.

Three of four times a month, trips are organized so they can last a whole weekend, allowing Tulio to forget “all the problems and the daily stress”. It’s demanding and enduro requires “physical performance every day” in order to “overcome barriers that sometimes the bike cannot”. The feeling of overcoming these obstacles that he considers, at first, impossible is what fascinates him about the sport. In the future, he’d like to try his hand at mountain biking and skydiving.

Impossible is nothing, unimaginable is doable. That's why Anna falls from the sky, simply to get her heartpulse to a faster beat.

FLYING *high*



ANNA Mendrzycka doesn't believe in the impossible but the idea of skydiving was, at first, "unimaginable". However, for her 25th birthday, her friends gifted her a skydiving jump. According to Anna, "words can't describe that feeling". As the adrenaline kicked in, the view from above was so "amazing" that as soon as she landed she "wanted to be in the sky again". One month later, her fiancé challenged her to try flying an airplane with an instructor. These made them want to start seizing new adrenaline-fueled activities as they began to realize they "really love adrenaline". After that, they tried a slew of experiences: jumping in Wrocław stadium; riding a monster truck and a motorcycle; scuba diving and diving; windsurfing; indoor skydiving and a spontaneous zip-line adventure during a trip to Montenegro. Anna recounts the experience by highlighting how "unique and unforgettable" it was. For her, the best part is that they do these things "together" and the fact that they "share feelings and support each other".

© E.Olena Kuchenko / Shutterstock

**ANNA
MENDRZYCKA**



AGE
30 YEARS OLD
POSITION
STORE MANAGER AT HEBE
LIVING IN
ŁÓDŹ, POLAND



Feed.

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