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TREATMENT OF THYROID WITH THE HELP OF CORIANDER SEED

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ABSTRACT

Thyroid is a gland in human body known as thyroid gland and it is very important to produce very beneficial hormones. The thyroid gland is responsible and influences many metabolic processes in the body. The most common hormones produced by the thyroid gland are Triodothyronine and Thyroxine. These hormones shortly know as T3 and T4 provide assistance in regulating metabolism and growth in the human body. Thyroid gland diseases are a public health problem worldwide. A person generally faces the thyroid related problems when there is imbalance in hormone production. There are two different types of thyroid such as hypothyroidism and hyperthyroidism. Plants have been used since long times to heal and cure diseases. India

has one of the richest herbal medicine tradition in the world. Medicinal plants play an important role in traditional medicine.

KEYWORDS: Thyroid, Thyroid Gland, Hypothyroidism, Hyperthyroidism, Coriander Seed, Traditional Medicine.

INTRODUCTION

Thyroid is a small Butterfly Shape gland found at the base of neck. Thyroid makes thyroid hormone. Thyroid hormone controls many activities in body including how fast calories can burn and how fast the heart beats. Diseases of the thyroid cause it to make either too much or too little of the hormone. Women are more likely than men to have thyroid diseases. Thyroid gland is brownish-red and soft. Thyroid weight varies it averages 25-30 g in adults (it is slightly heavier in women) The thyroid gland, located immediately below the larynx on each side of and anterior to the trachea is one of the largest of the endocrine glands. Thyroid hormones are important for normal body growth and development. It plays an important role

on body metabolism and responsible for controlling metabolic rate. Thyroid hormone effect almost on all cells of the body. According to a projection from various studies on thyroid disease it has been estimated that about 42 million people in India suffer from thyroid disease. Thyroid disorder may seriously affect patient's health. Thyroid is an endocrine gland in the neck consisting of two lobes connected by an isthmus. It is found at the front of the neck below the Adam's apple. The thyroid gland secretes thyroid hormones which primarily influence the metabolic rate and protein synthesis. The hormones also have many other effects including those on development. The thyroid hormones triiodothyronine (T3) and thyroxine (T4) are created from iodine and tyrosine. The thyroid also produces the hormone calcitonin, which plays a role in calcium homeostasis. Hormonal output from the thyroid is regulated by thyroid-stimulating hormone (TSH) secreted from the anterior pituitary gland which itself is regulated by thyrotropin-releasing hormone (TRH) produced by the hypothalamus.

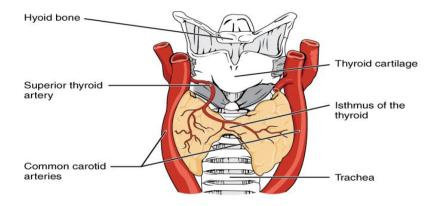


Figure. (a): Thyroid Gland.



Figure. (b): Thyroid is located in the Neck below the Adam's Apple.

The dry fruits are known as coriander seeds. In India it is commonly known as Dhaniya. This are the fully dried ripe fruits of the plant known as Coriandrum sativum Linn. Belonging to family Apiaceae. The fruits should contain NLT 0.3% to 1% of volatile oil. Fruits are 2 to 4mm in diameter and 4 to 30mm in length. Coriandre seed is traditionally used in the treatment of several diseases and it is also used for the treatment of thyroid disease.



Figure. Coriander Seed.



Figure. Coriander Plant.

Scientific Classification

Kingdom: Plantae

Clade: Angiosperms

Clade: Eudicots

Clade: Asterids

Order: Apiales

Family: Apiaceae

Genus: Coriandrum

Species: C. sativum

Binomial Name: Coriandrum sativum L.

Two types of thyroid imbalance conditions

1. Hyperthyroidism: Hyperthyroidism or overactive thyroid causes the thyroid gland to produce more thyroid hormone than the body needs. Hyperthyroidism occurs when the

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thyroid makes too much T3 & T4 or both. A variety of conditions can cause hyperthyroidism. Graves' disease an autoimmune disorder is the most common cause of hyperthyroidism. It causes antibodies to stimulate the thyroid to secrete too much hormone. Graves' disease occurs more often in women than in men. It tends to run in families which suggests a genetic link. thyroid gland just becomes overactive and begins to secrete more hormones which causes hyperthyroidism.

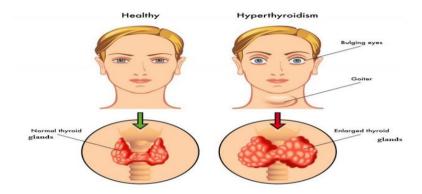


Figure. Hyperthyroidism.

Symptom of Hyperthyroidism

- Increased Appetite
- Nervousness
- Restlessness
- Weakness
- Inability to Concentrate
- Irregular Heartbeat
- Difficulty Sleeping
- Itching
- Hair Loss
- Tremor
- Excess Consumption of Iodine
- Nausea and Vomiting
- Changes in Menstrual Pattern
- Breast Development in Men
- **2. Hypothyroidism:** Hypothyroidism or underactive thyroid is when your thyroid does not make enough thyroid hormones. Hypothyroidism is a clinical syndrome caused by deficiency

of thyroid hormones. In infants and children hypothyroidism causes retardation of growth and development and may result in permanent motor and mental retardation. In adults autoimmune thyroiditis (Hashimoto's thyroiditis) is the most common cause of hypothyroidism. This may be isolated or part of the polyglandular failure syndrome type II (Schmidt's syndrome), which also includes insulin-dependent diabetes mellitus, pernicious anemia, vitiligo, gonadal failure hypophysitis, celiac disease, myasthenia gravis and primary biliary cirrhosis. This condition generally effects woman more than men and shows its worst face when becomes older and this needed to be tackled and managed during the times of pregnancy. This situation generally occurs to the one who is suffering from underactive thyroid or the glands which control the thyroid functioning. There are many other causes which can lead to this serious condition.in other words the insufficient production of the hormones can lead to this condition.

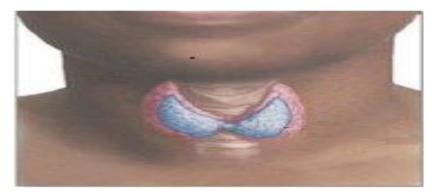


Figure. Hypothyroidism.

Symptom of Hypothyroidism

- Depression
- Fatigue
- Constipation
- Weight Gain
- Dry Skin
- Puffy Face
- Muscle Weakness
- Slow Heart Rate
- Thinning Hair
- Difficulty Breathing
- Enlarge Thyroid Gland(Goiter)

- Pain, Stiffness or Swelling in your Joint
- Increase Sensitivity to Cold
- Irregular Menstrual Period

Structure of T3 & T4 Hormones

Chemical Composition of Coriander Seed: Coriander Seed Nutritional Value Per 100 g.

Principle	Nutritional Value	Unit
Water	8.86	g
Energy	298	Kcal
Carbohydrates	54.99	g
Protein	12.37	g
Total Fat	17.77	g
Chelosterol	0	mg
Dietary Fiber	41.9	g
Vitamins		
Folates (B9)	1	μg
Niacin (B3)	2.130	mg
Riboflavin (B2)	0.290	mg
Thiamin (B1)	0.239	mg
Vitamin A	0	IU
Vitamin C	21	mg
Electrolytes		
Sodium (Na)	35	mg
Potassium (K)	1267	mg
Minerals		
Calcium (Ca)	709	mg
Copper (Cu)	0.975	mg
Iron (Fe)	16.32	mg
Magnesium (Mg)	330	mg
Manganese (Mn)	1.900	mg
Phosphorus (P)	409	mg
Zinc (Zn)	4.70	mg

TSH LevelsTSH Level in children,men,women and during pregnancy can vary based on their age.

1.Age Range(Children)	Normal	Low	High
Premature Birth	0.7 to 27 mU/L	<0.7 mU/L	>28 mU/L
0 to 4 days	1 to 29 mU/L	<1 mU/L	>30 mU/L
2 to 20 weeks	1.7 to 9.1 mU/L	<1.7 mU/L	>9.2 mU/L
20 weeks to 18 years	0.7 to 64 mU/L	<0.7 mU/L	>64 mU/L
2.Age Range(Men)	Normal	Low	High
18 to 30 years	0.5 to 4.15 mU/L	<0.5 mU/L	>4.15 mU/L
31 to 50 years	0.5 to 4.15 mU/L	<0.5 mU/L	>4.15 mU/L
51 to 70 years	0.5 to 4.59 mU/L	<0.5 mU/L	>4.6 mU/L
71 to 90 years	0.4 to 5.49 mU/L	<0.4 mU/L	>5.5 mU/L
3.Age Range(Women)	Normal	Low	High
18 to 29 years	0.4 to 2.34 mU/L	<0.4 mU/L	>4.5 mU/L
30 to 49 years	0.4 to 4.0 mU/L	<0.4 mU/L	>4.1 mU/L
50 to 79 years	0.46 to 4.68 mU/L	<0.46 mU/L	4.7 to 7.0 mU/L
4. Age Range(during pregnancy	Normal	Low	High
First Trimester	0.2 to 2.5 mU/L	<0.2 mU/L	2.5 to 10 mU/L
Second Trimester	0.3 to 3.0 mU/L	<0.3 mU/L	3.10 to 4.50 mU/L
Third Trimester	0.8 to 5.2 mU/L	<0.8 mU/L	>5.3 mU/L

Coriander Seed for Thyroid

Coriander seed water is one of the best home remedies to kill thyroid in 8 days. Using this remedy can reduce the symptoms of thyroid. The minerals present in the coriander seeds are very helpful and fighting the infection that can grow in the body. One of the best thing about the coriander seed water is 100% safe for use to pregnant ladies and nursing mothers also. You can get rid of all types of thyroid disorders simply bringing this natural remedy in use for your thyroid problems.

Required

- 1. Coriander Seed
- 2. Drinking Water
- 3. Honey (If Necessary or According to your Taste)

Simple Steps to Use

- Take some drinking water and put it over a suitable flame.
- Add one tablespoon of coriander seed to this boiling water.
- Let it covered and boiling on a low flame for 15 to 20 minutes.
- Now take this coriander water in a glass to drink. And Chew rest of the seeds.

- You can add one tablespoon of honey to this coriander seed water for making it tasty and sweet.(If Necessary or According to your Taste)
- Drink this coriander water and chew rest of the seeds every morning empty stomach for at least one week to see improvements in your thyroid symptoms.
- This remedy is safe and there is no side effects and this will definitely help you killing the thyroid problems that you are facing. As a better result to your problems I suggest to include little exercise in your daily routine, this will solve half of your problems.

REFERENCES

- 1. Kokate, C K. Pharmacognosy. 16th Edn., Nirali Prakasham, Mumbai, India, 2009.
- 2. Khandelwal K R. Practical Pharmacognosy Techniques and Experiments. 15th ed., Pune, Nirali Prakashan, 2006; 155–163.
- 3. Dillman WH: The thyroid. In Goldman L, Bennett JC (eds): Cecil Textbook of Medicine, 21st ed. Philadelphia, WB Saunders, 2000; 1231–1250.
- 4. Weetman AP, McGregor AM: Autoimmune thyroid disease: Further developments in our understanding. Endocr Rev., 1994; 15: 788.
- 5. Thyroid symptoms That Signal Thyroid Problems...Web MD www.webmd.com/women/understanding-thyroid-problems-symptoms.
- 6. Hall J E. Guyton and Hall text book of medical physiology. 13th Ed., Philadelphia, Elsevier publication, 2016; 951.
- 7. About coriander seed and thyroid https://www.youtube.com/watch?v=dJ1g4Dzsrl0.
- 8. Mohammadi Abolfazl, Amrollahi Hadi, Malek Frhad and Nazari Hossein Journal of Medicinal plant Research, 2014.
- 9. R. Sasi Kumar, P. Balasubramanian, P. Govindaraj, T. Krishnaveni Journal of pharmaconosy and phytochemistry, 2014.
- 10. Hyperthyroidism detail information https://www.mayoclinic.org/diseases conditions/hyperthyroidism/symptoms-causes/syc-20373659.
- 11. Thyroid detail information https://en.wikipedia.org/wiki/Thyroid.
- 12. Hypothyroidism detail information https://www.mayoclinic.org/diseases-conditions/hypothyroidism/symptoms-causes/syc-20350284.
- 13. TSH normal range by age detail information https://www.healthline.com/health/tsh-normal-range-by-age.
- 14. Detail introduction of thyroid https://www.google.com/search?ei=lr0YXNz1HMXovgTc77LoCg&q=introduction+of+t

hyroid&oq=introduction+of+thyroid&gs_l=psy-ab.3..0l5j0i22i30l5.2412.13422..16273...0.0..2.594.6436.0j17j6j2j1j2.....0....1..gws-wiz.....0..0i71j0i67j0i131j0i131i67.nJ1WqFPDz8Q.

- 15. K. Premdass, M. Lekeshmanaswamy and M. Jesikha, Journal of Pharmaceutical and Biological Research, 2014.
- 16. Lakhera A, Ganeshpurkar A, Bansal D, Dubey. Chemopreventive role of Coriandrum sativum against gentamicin-induced renal histopathological damage in rats. US National library of medicine National, 8(2): 99-102.
- 17. Coriander seed detail information https://en.wikipedia.org/wiki/Coriander.
- 18. About coriander seed and chemical composition https://www.google.com/search?q=about+coriander+seed+and+chemical+constituent&oq =about+&aqs=chrome.2.69i57j69i60j69i59l3j0.7607j0j7&sourceid=chrome&ie=UTF-8.
- 19. Different type https://www.google.com/search?q=research+papers+on+coriander&sa=X&ved=2ahUKE wj-7OTdkanfAhVLv48KHb2JCS0Q1QIoAHoECAQQAQ&biw=1517&bih=695.
- 20. Various images of thyroid https://www.google.com/search?q=thyroid&source=lnms&tbm=isch&sa=X&ved=0ahUK EwisgtvikqnfAhWJK48KHW77DksQ_AUIDygC&biw=1517&bih=695.
- 21. All parts of coriander seed https://www.google.com/search?q=coriander+seeds&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiij4GLk6nfAhWWiXAKHeyIBUAQ_AUIDigB&biw=1517&bih=695.
- 22. Lewis, Charlton T. "coriandrum" A Latin Dictionary.
- 23. Nutritional data of coriander seed per 100 g https://www.nutrition-and-you.com/coriander-seeds.html.