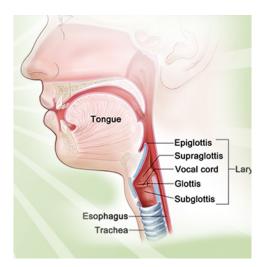


## lodine and Breast Health - Part 2

#### Presented by:

### Introduction

The thyroid gland surrounds the trachea in the neck and absorbs iodine from the blood using it to make the thyroid hormones T3 and T4, which contain three and four atoms of iodine per molecule respectively. This mineral is therefore essential to optimal functioning of the thyroid gland and for thyroid hormone production.



the most common cause of hypothyroidism and goiter, doctors changed the standard protocol for hypothyroidism by substituting thyroid extract for iodine. Endocrinologists and family doctors still administer T4 to reduce the symptoms of hypothyroidism.

Unfortunately in some cases iodine deficiency in women may predisposes them to breast cancer.<sup>1,2</sup> Furthermore, giving T4 to iodine-deficient women further increased their breast cancer risk.<sup>3</sup> Modern iodine researchers/clinicians using Lugol's iodine/iodide solution have had success with hypothyroidism, especially when iodine is combined with other important nutrients.

Until the early 1900's, doctors treated both hypothyroidism and Grave's disease with inorganic iodine. By the 1930s, even though iodine deficiency was (and still is)



#### **QUESTION:**

About how many women in the U.S. will develop breast cancer in their lifetime?

A) 1 in 6 B) 1 in 8 C) 1 in 9

ANSWER: B) 1 in 8

**TRUE OR FALSE:** A lower level of lodine in the body means less risk of breast cancer

ANSWER: False

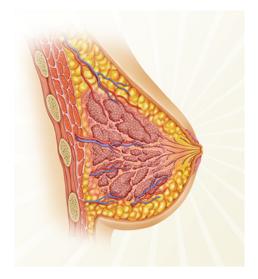
# Finish this sentence...

lodine is a .....

A) hormone B) gland C) mineral

ANSWER: C) mineral

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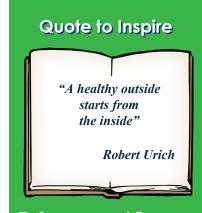


Breast tissue is more efficient in storing iodine compared to the thyroid gland.<sup>4</sup> So it is not surprising that there is a strong connection between breast health and iodine.<sup>5</sup> With 1 in 8 U.S. women (just under 12%) developing invasive breast cancer over the course of her lifetime, monitoring iodine is a simple way to reduce breast cancer risk.<sup>6</sup> Japanese women ingest much more iodine in their diets than American women and have a 65% lower risk of breast cancer than American women. Iodine is so important for breast health, that it may be that hypothyroidism frees up more iodine for use in breast tissue actually lowering their levels of breast cancer. The body, it would seem protects breast tissue at the expense of thyroid function.

Autoimmune thyroid disease occurs more often in patients with breast cancer. Researchers have found a significant link between breast cancer and Hashimoto's thyroiditis. One recent study suggested that any woman with breast cancer be screened for Hashimoto's thyroiditis.<sup>5,7</sup> Iodine levels in breast tissue were lower in women diagnosed with breast cancer than in women with normal breasts.<sup>7,8</sup>

Iodine's has also been shown to improve fibrocystic changes to breast tissue.<sup>9,10</sup>

Before assuming you should take iodine, have your doctor check your iodine levels. A simple blood test or a 24 hour urine test will provide your iodine levels. If they are low, supplementation with seaweed or having a physician provide Lugol's are two effective ways to raise your iodine levels. Iodine excess however, can give the symptoms of hypothyroidism also so it is best to retest iodine levels periodically if on an iodine supplement. Other sources of iodine outside of seaweed and kelp, includes egg and dairy products.



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