Angelica archangelica
Bladder Facts

• Average adult passes about 1 ½ quarts of urine each day
• Bladder holds up to 2 cups of urine
• The bladder is a muscle
• When full, the bladder is about the size of a large grapefruit
• Both men and women experience bladder problems
  – Can be painful, disrupt sleep, and significantly reduce quality of life
Solution for Bladder Problems in Men AND Women

• *Angelica archangelica* from Iceland
• Clinically studied to help reduce urinary frequency problems
  – Shown to increase bladder capacity and reduce number of urinations at night, particularly in participants who had small bladder volumes
  – **What does this mean?** Participants had to make fewer bathroom trips at night
  – Fewer bathroom trips means better sleep and better rest
Benefits of Angelica archangelica

• Overactive bladder and Stress Incontinence
• BPH
• Nocturia (nighttime trips to the bathroom)
• Bed-wetting
• Interstitial cystitis

• In Iceland, Angelica is more popular for bladder issues than saw palmetto
How to use Angelica archangelica

• Dosage: 100-200 mg daily
• If have bladder problems during the day, take in the morning; if have bladder problems at night, take before going to bed
• Very safe – no significant adverse effects
Iodine: The Forgotten Mineral
Iodine Deficiency/Insufficiency

• 2 billion people worldwide are iodine deficient
• United States deficiency rate is about 10%, BUT
  – Iodine levels in American women of reproductive age have decreased 55% since the 1970s
  – Iodine intake overall has fallen about 50%

“Iodine deficiency is the single greatest preventable cause of mental retardation.”

World Health Organization

Why Do We Need Iodine?

• Hormone production (particularly thyroid hormones)
• Immune system function
• Other properties:
  – Antibacterial
  – Anti-cancer
  – Anti-parasitic

Thyroid and Breast tissue have particularly high requirements for Iodine
Iodine deficiency linked to...

• Cancer
• Obesity
• Heart disease
• Fibromyalgia
• ADHD
• Other mental health-related disorders
• Possible links to Alzheimer's and Parkinson's disease, and multiple sclerosis
Signs you might be low in iodine

- Aching muscles
- Always fatigued or exhausted
- Irritable or impatient
- Cold hands and feet
- Often depressed and anxious
- Dry, coarse and lifeless hair
- Dry skin
- No libido
- Don’t eat any more but gain weight
- Insomnia
- Slow heartbeat
- Listless, forgetful, antisocial
- Losing enthusiasm for life
Iodine and the Thyroid
The Body’s Gas Pedal

Secretes hormones which control
- Energy use
- Protein synthesis
- Body temperature
- Other vital functions

The thyroid gland regulates metabolism
Thyroid Hormone Production

Pituitary Gland → TSH → Thyroid Gland

Conversion

inactive

T3 (active)

Cell
Cell
Cell
Cell
Cell
Cell
Cell
Measuring Thyroid Function

• TSH (Thyroid Stimulating Hormone) test
  – Inaccurate
  – Misses many cases of low thyroid function
  – Doesn't measure the actual levels of T4 and T3

Many people have symptoms of thyroid problems – even with “normal” TSH levels or AFTER being treated with synthetic thyroid hormones!
Basal Body Temperature

• In the morning upon waking, without getting out of bed, place a glass thermometer in your armpit and hold arm close to body for 10 minutes
• Read temperature and record
  – since temperature rises with ovulation and stays higher until menses occurs, pre-menopausal women should only monitor their temperature during the first 7 days following the end of their period to get a true reading
• Repeat procedure each day for at least three days, preferably 10 days
• Normal = between 97.8 and 98.2 degrees Fahrenheit
• Anything consistently under 97.8 indicates thyroid dysfunction
<table>
<thead>
<tr>
<th>Hyper vs. Hypothyroid</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperthyroid (overactive)</td>
<td>Hypothyroid (underactive)</td>
</tr>
<tr>
<td>• Nervous</td>
<td>• Aching muscles</td>
</tr>
<tr>
<td>• Restless</td>
<td>• Fatigue</td>
</tr>
<tr>
<td>• Weight loss</td>
<td>• Irritable/Impatient</td>
</tr>
<tr>
<td>• Increased appetite</td>
<td>• Cold hands and feet</td>
</tr>
<tr>
<td>• Increased sweating</td>
<td>• Dry, dull hair and skin</td>
</tr>
<tr>
<td>• Frequent bowel movements or diarrhea</td>
<td>• Loss of libido</td>
</tr>
<tr>
<td>• Pounding rapid pulse</td>
<td>• Gain weight easily</td>
</tr>
<tr>
<td>• Skin blushing</td>
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**Hashimoto’s Disease**

**Grave’s Disease**
Other Thyroid Problems

• Goiter – swollen thyroid
  – Overstimulated thyroid gland swells (can be due to lack of iodine)

• Thyroid cancer
  – Radioactive iodine is given to destroy thyroid cancer cells – it is not taken up by other cells so targets only thyroid cells
  – This is NOT the same type of iodine used in iodine supplements!

Fact or Fiction? Increased iodine intake causes thyroid cancer. FICTION!
Cure the Thyroid with Iodine

\[
\text{Iodine} + \text{L-tyrosine} \rightarrow \text{Thyroid Hormones}
\]