

# Featured Topic: Boswellia (5 slides)

Terry Talks Nutrition

IMPROVING THE HEALTH OF AMERICA

# The new “everything herb”!

- According to SPINs data, boswellia products in the joint health category grew 132% last year (to a total of \$14 million)
- Boswellia is for more than just joints, however:
  - Cancer
  - Lung diseases
  - Liver protectant
  - Heart disease
  - Pain reliever
  - Anti-inflammatory

# What makes boswellia so good for so much?

- Boswellia stops the 5-LOX inflammation pathway
  - One part of the 5-LOX pathway leads to inflammatory **leukotrienes**, which are associated with asthma and allergies, arthritis, and inflammatory bowel diseases
  - The other part of the 5-LOX pathway involves compounds that **interfere with the body's ability to kill cancer** cells
- Non-Steroidal Anti-inflammatory drugs (NSAIDS) stop inflammation on the COX pathway but do **NOTHING for the 5-LOX pathway**
  - This is why asthma isn't treated with ibuprofen
  - NSAIDS have a lot of adverse effects
  - In fact, **25% of individuals using NSAIDs experience some type of side effect**, and as many as 5% develop serious health problems

# Boswellia Research: Brain Cancer

- In Europe, boswellia is an orphan drug for the reduction of brain swelling associated with cancer
- Clinical trial: 44 patients treated with radiation therapy for brain cancer received either boswellia or placebo
- Results: **60% of the boswellia group had a 75% or greater reduction in brain swelling**, versus only 26% of the placebo group participants
- Additionally, in cases of malignant brain cancer, animals treated with boswellia extract had **double the survival time** versus the placebo group

# More Uses for Boswellia

- **Cancer Treatment and Prevention**
  - In a cell study of pancreatic cancer, exposure to AKBA, the key compound in boswellia, **suppressed pancreatic cancer cell formation by 50 – 90%**
  - In an animal model of pancreatic cancer, animals receiving AKBA had a **70% reduction in tumor size** versus untreated animals
- **Asthma and Allergies**
  - **70% of asthma patients treated with boswellia had improved lung function** versus only 27% of participants in the control group
- **Colitis and Inflammatory Bowel Diseases**
  - **63% of patients with chronic diarrhea and colitis achieved remission** after 6 weeks of boswellia treatment versus 26% in the placebo group
- **Arthritis and Joint Diseases**
  - After treatment with boswellia (plus curcumin) **93% of people with arthritis of the knee could walk 1000 meters** versus just 85% in the drug treatment group

# How to pick a boswellia extract

- The beneficial activity of boswellia is strongly associated with the key compounds, boswellic acids and AKBA
- However, one specific boswellic acid – beta boswellic acid – actually CAUSES inflammation, it doesn't reduce it
- Look for boswellia extracts which are labeled to contain less than 5% beta boswellic acids and at least 10% AKBA – the most powerful compound in boswellia
- Take 500 mg boswellia, or take in combination with curcumin or other natural anti-inflammatories
- Boswellia has no known adverse effects

# **Fat-burning Breakfast (1 slide)**

**Terry Talks Nutrition**

IMPROVING THE HEALTH OF AMERICA

# Big Breakfasts have Big Benefits

- 29 overweight but otherwise healthy men and women received either a high fat breakfast (35% carbs, 20% protein, 45% fat) or a high carb breakfast (60% carbs, 20% protein, 20% fat) for four weeks, while eating a “neutral” lunch and dinner
  - Results: High fat group saw increased fat-burning (fat oxidation) lasting for 24 hours as well as better blood sugar levels and less insulin resistance
- In a separate study, researchers compared a large breakfast, average sized lunch, and small dinner versus eating 6 small meals per day in overweight people with Type 2 diabetes for three months
  - Results: the big breakfast group experienced less hunger and lost 11 lbs each on average, while the small meals group *gained* weight
  - Additionally, the big breakfast group saw reductions in their blood sugar levels and were able to reduce their diabetes medication dosages

**Are you at risk of heart disease?  
Exercise and Eggs can help.  
(2 slides)**

**Terry Talks Nutrition**

IMPROVING THE HEALTH OF AMERICA

# Minimize genetic risk factors for heart disease with exercise

- Researchers observed 500,000 people for 6 years, and assessed their
  - All had genetic risk factors for heart disease
  - Some also had additional risk factors such as high blood pressure and diabetes
  - Researchers gathered data on participants activity and fitness levels
- Results
  - The most active people, even those with the highest genetic risk, had a 50% reduction in their risk of heart disease
  - In other words, **exercise was able to nullify a risky genetic profile** and reduce heart disease to the same levels as people with low or moderate genetic risk factors

# An Egg a day keeps the Heart Doctor away

- Researchers in China looked at health data collected over a 10 year period from about half a million adults between the ages of 30-79, who were free of heart disease, cancer, and diabetes at the start of the study
- They sorted the participants based on their egg consumption: daily, occasionally, or never
- Result: versus not eating eggs, daily egg eaters had
  - 26% lower risk of experiencing a stroke
  - 28% lower risk of DYING from a stroke
  - 18% lower risk of DYING from heart disease

# Appreciate the Opossum (2 slides)

Terry Talks Nutrition

IMPROVING THE HEALTH OF AMERICA

# First, a word about ticks

- A mild winter and an increase in the mouse population equals a bad tick season this year
  - Mice carry the bacteria that causes Lyme, and pass it to ticks when the tick bites them
- **82% of all tick-borne diseases are Lyme disease**
- Reported Lyme disease cases have doubled since 2004, but most experts agree that **the real number is probably 10 times higher** because of the difficulty diagnosing in Lyme, and underreporting of known cases

# What does Lyme disease have to do with the possum?

- **Possoms eat ticks**
  - Possoms are little tick vacuum cleaners, sucking them up whenever they find them
  - Scientists believe a possum can kill as many as 4,000 ticks a week
- Possoms also catch and eat rats, mice, snails, and slugs
- Possoms are **immune to poisonous snakes**, so they will also eat rattlesnakes
  - A protein in their blood neutralizes venom
- **Possoms don't get rabies**
  - Possoms have a naturally low body temperature, too low for the rabies virus to survive. It is very, very rare for a possum to get rabies.
- If you see a possum walking around during the day, it was probably just disturbed by people or dogs and will go back into hiding. It won't hurt you, your kids, or your dog. Leave it alone and let it eat ticks!