Chris Kilham
The Medicine Hunter

- Herbal Expert, Author, Educator
- Explorer in Residence at the University of Massachusetts at Amherst
- Chris travels the world in search of traditional, plant-based medicines and works with shamans, healers, growers, harvesters, scientists, trade officials and other plant medicine experts in dozens of countries.
- Lectures extensively in the USA and abroad
- Frequent appearances on radio and television, including FOX News, ABC, CBS, NBC, PBS, CNN, MSNBC, BBC and NPR
Vitality Secrets from Ancient Cultures
Maca & Rhodiola

Chris Kilham
The Medicine Hunter
Herbal Adaptogens

• Every area of the world has its favorite adaptogen

• Characteristics:
  – Non-toxic
  – Normalizing influence on the body
    • Modulation not stimulation
  – Nonspecific response – increases the body’s resistance to stress
Maca

- The Peruvian Power Plant
- Not a stimulant
  - Source of natural energy
- Traditional use
  - Libido
  - Energy
  - Stamina
- Current research
  - Reproductive medicine: sperm quality and quantity
  - Energy and Mood
  - Anxiety
  - Menopause
  - Libido
How Does it Work?

• No impact on testosterone, estradiol, LH, FSH, and prolactin levels
  – May act to normalize levels of key hormones
• Exact mechanism of action still unclear – may be combination effect of different bioactive compounds
  – sterols, including sitosterol, campesterol, ergosterol, brassicasterol and ergostadienol
  – maca exceeds both potatoes and carrots in value, and is a good source of iron, magnesium, calcium, potassium and iodine
  – Other active compounds: macamides, macaenes, isothiocyanates
A pilot investigation into the effect of maca supplementation on physical activity and sexual desire in sportsmen

Mark Stone, Alvin Ibarra, Marc Roller, Andrea Zangara, Emma Stevenson

Aims of the study: Maca (Lepidium meyenii Walp) is consumed both as a sports supplement by strength and endurance athletes, and as a natural stimulant to enhance sexual drive. However, whether or not the postulated benefits of maca consumption are of scientific merit is not yet known. The aim of the study was therefore to investigate the effect of 14 days maca supplementation on endurance performance and sexual desire in trained male cyclists.

Materials and methods: Eight participants each completed a 40 km cycling time trial before and after 14 days supplementation with both maca extract (ME) and placebo, in a randomised cross-over design. Subjects also completed a sexual desire inventory during each visit.

Results: ME administration significantly improved 40 km cycling time performance compared to the baseline test (P=0.01), but not compared to the placebo trial after supplementation (P>0.05). ME administration significantly improved the self-rated sexual desire score compared to the baseline test (P=0.01), and compared to the placebo trial after supplementation (P=0.03).

Conclusions: 14 days ME supplementation improved 40 km cycling time performance and sexual desire in trained male cyclists. These promising results encourage long-term clinical studies involving more volunteers, to further evaluate the efficacy of ME in athletes and normal individuals and also to explore its possible mechanisms of action.
Clinical Trial Results

- Significant improvement in physical performance (time trial on a cycling machine) (see graph)
- Almost a 10% increase in sexual desire

*Fig. 1. 40 km time trial performance before and after 14 days supplementation with maca extract in 8 trained male cyclists. *Significantly different from pre-supplementation.*
Additional Maca Research Results

- Improved sperm count and motility (clinical trial)
- May prevent hypertension (inhibits ACE (angiotensin I-converting enzyme))
- May prevent postmenopausal weight gain, changes in lipids (fats) and bone metabolism (tested in an animal model)
- Treatment for mild erectile dysfunction (clinical trial)
- Relieved sexual dysfunction caused by use of antidepressant drugs (SSRIs) (clinical trial)
- Reduced anxiety, depression and sexual dysfunction in postmenopausal women – without estrogenic effects (clinical trial)
- Prevented enlargement of the prostate gland (animal model of benign prostatic hyperplasia)
- Stimulates hair growth (applied topically)
References

Extreme Farming

- Poor soil
- Hostile weather
- Searing sun
- Blistering winds

Almost all maca farming is done by hand!
Growth and Harvest

• Cultivated exclusively at an altitude of 13,000 to 14,000 feet in the Peruvian Central Andes
• This area is *legendary* for its harsh growing conditions
• **Maca** and **potato** are the only food crops which can survive
• Maca produces a radish-like tuber which is dried and stored after harvest
Certified Organic

• Institute for Marketecology (IMO) based in Switzerland
  – Accredited to provide organic certification by the USDA National Organic Program (NOP)
• Raised without synthetic fertilizers or pesticides
• No genetically modified plants
• No irradiation
Fair Trade

• Local people should be fairly compensated for their crops
• Additional support
  – Upgrading and improving a dental office
  – Equipping and connecting an Internet center
  – Rebuilding and refurbishing a school
Chakarunas Trading Co is a 13-year old maca trading company located both in Lima, Peru and in Ninacaca, up in the Peruvian Andes. The company is run by Sergio Cam, and is the soles supplier of our certified organic maca.
Who Should Take Maca?

- Maca is useful for anyone who wants more energy, stamina, or endurance, anyone who wishes to boost libido, and anyone who wants to improve overall vitality.
- Maca demonstrates *absolutely zero toxicity*, and it makes people feel good. Maca is taken in large quantities by the young (from infancy) to the old, and is well established as an aid for women who want to eliminate the discomfort of menopause, including night sweats and hot flashes.

So just about anyone can benefit from Maca!

- Dosage: 2-4 grams daily
Golden Root

RHODIOLA ROSEA
Where is the World is Rhodiola?

- Siberia
- Mongolia
- Kazakhstan
- China
Rhodiola

- Rhodiola rosea
- Russia, China
- Ultimate “power herb”
  - fights fatigue
  - combats stress
  - antioxidant and anticancer properties
  - protects body and mind against oxygen deprivation
  - enhances overall immune function
  - promotes healthy sexual function in men and women
- Key compound: rosavins

I ♥ Rhodiola!
How Does it Work?

• Reduces the negative physical effects of stress on the body
• Particularly effective at lowering corticotrophin releasing factor (CRF)
  – Released as part of the stress response; triggers the secretion of cortisol
• Chronic high levels of CRF have been associated with
  – Decreased libido
  – Depression
  – Changes in sleep and appetite levels
Rhodiola Research

- **Boosts energy during physical exertion**

- **Increases mental performance and concentration**

- **Relieves the symptoms of anxiety**

- **Alleviates mild to moderate depression**

- **Improves physical fitness and reduces mental fatigue**
Rhodiola for Fertility

• Young couples in Siberia would carry rhodiola in bouquets prior to marriage in acknowledgement of its ability to enhance fertility

• Research
  – 40 women with amenorrhea (lack of menses); 25 experienced return of cycles after 2 weeks of rhodiola; 11 became pregnant
  – Physicians have reported that patients who failed to conceive using standard fertility drugs became pregnant after several weeks of rhodiola use
Who Should Take Rhodiola?

• Everyone!
• Especially useful for people in stressful situations
  – Acute stress – students facing final exams; high pressure work situation, etc
  – Anyone with a modern, high pressure lifestyle
• Women looking to enhance fertility
• Anyone interested in increasing physical energy, stamina, or libido
• Dosage: 150 -200 mg standardized powder extract (3% rosavins; 0.8% salidroside)
• Also available as a liquid spray
• Or - take it the Siberian way: a swig of rhodiola-infused vodka!
Conclusion

- Maca and Rhodiola are time-tested botanicals that can effectively:
  - Combat stress
  - Increase energy
  - Enhance libido
  - Boost the immune system
  - Cope with modern life!