
**Ergosterol** — the functional component of LDL-C


**Sterol.** [Gr. *Steros,* solid, + L. *Oleum,* oil] Related to fats and belonging to the lipoids (lipids).

**LDL-C.** [Low Density Lipo-protein – Cholesterol] Often referred to as the bad cholesterol, is far different from the good HDL-C. An ergosterol attached to a protein.

As bad LDL-C in the blood increases arteriosclerosis progresses.

**Arteriosclerosis**
also known as Artherosclerosis
[L. *Arteriola,* small artery,
+ Gr. *Sklerosis,* hardening]

**Note: the good HDL-C does not cause plaque.**

Increased levels of LDL-C is strongly associated with hardening of the arteries with arterial plaque.

Once established a plaque formation can tear off to trigger a clot withing the artery. This clot can then be carried by the blood flow until it plugs a smaller artery to chock off all blood flow. This is the hallmark of tissue death (iscimia), heart attacks and ischemic stokes.
Ergotism

**Ergot, n.** [Fr. Ergot, argot, stub of a branch, disease of cereal grasses] An altered seed by fungus, may cause death.

**-ism.** [L. -ismus; Gr. -ismos.] A suffix implying doctrin, theory, principle, system, or practice of;

Two general types of symptoms.

**Convulsive symptoms of ergotism.**

- Cramps
- Painful seizures
- Spasms
- Itching
- Tingling
- Numbness
- Nausea
- Vomiting
- Diarrhea
- Brain fog.
- Anxiety, Panic
- Memory problems, mania
- Dementia, Psychosis

Stomach and digestive problems usually begin before nerve and mood disorders start.

**Circulatory symptoms of ergotism.**

- Blood flow is restricted, blocked or decreased.
- High blood pressure
- Cold hands and feet that might peel
- Easy to feel hot or cold, hot flashes
- Raynaud's Phenomenon; loss of blood flow to the fingers, toes, ears, and nose.
- Swollen nose
- Dilated pupils
- Red eye syndrome
- Urinary retention, difficulty in urinating
- Shortness of breath with panic and anxiety
- Reduced blood flow to deep tissues such as:
  - prostate, joints, tendons, eyes, inner ear, scalp, and others
- Tinnitus, ringing in the ears

Antihistamines and decongestants cause constriction as well as the stimulants used to treat ADHD.

High blood pressure medicines that relax the arteries but do not clear the plaque, beta blockers such as Cardura® -doxazosin, Hytrin® -terazosin , Minipress® -prazosin.
Lowering cholesterol with statin drugs

Note: The heart is a large muscle

Rhabdomyolysis is a serious syndrome due to a direct or indirect muscle injury. It results from the death of muscle fibers and release of their contents into the bloodstream.

Advisory: New warning for statin drug
The FDA has issued a public health advisory on the cholesterol lowering drug Crestor

- Rhabdomyolysis is a rare but well known side effect of all statins.
- Various types of kidney failure also have been reported in patients treated with Crestor, as well as other statins.

Advisory: Health Canada
Health Canada advises consumers about important safety information on statins

- These medications include Lipitor, Zocor, Mevecor, Lescol and Lescol SL, Pravachol and Crestor.
- A greater risk of developing muscle-related problems,
- including a serious condition called rhabdomyolysis (serious muscle damage).

Diabetes is a risk factor for cardio-vascular disease.

Warning: Los Angeles Times
Statins raise the risk of type 2 diabetes in older women

- Cholesterol lowering medications -- statins
- marketed under such names as Zocor, Lipitor, Pravachol and Crestor

Warning: Centre for Cellular and Molecular Biology (CCMB)
Statin consumption could lead to anxiety

- anxiety and major depression are apparent in humans upon longterm administration of statins
- low cholesterol is found in mood disorders

Commentary
The statin - low cholesterol - cancer conundrum

- Searching Pubmed with the words 'cancer AND cholesterol' we identified nine cohort studies including more than 140,000 individuals
- 1 year statin therapy: obvious difference in cancer
- 4 year statin therapy: statistically significant increase in cancer
- 6 year statin therapy: three fold increase in all forms of cancer.
- statins are neither mutagenic nor genotoxic
- the reason amy be their disruption of immune system function

Belief is a vice.
Pain and suffering may or may not challenge a vice. -- Bryon