CORTI SLIM

FORGET THE CLAIMS. HERE'S THE EVIDENCE.

By David Schardt

f you watch television, scan the drugstore supplement shelves, or do any grocery shopping, odds are you've seen dozens of new products that promise to help you lose weight. Here's the scoop on three of them.

C-L-A-ter

"Tonalin CLA is an effective supplement that may help you decrease the amount of fat stored in your body," says the company Web site (cognis.com).

CLA, short for conjugated linoleic acid, is a mixture of fats that occur naturally in tiny amounts in meat and dairy products. It has been a substance in search of a cause ever since it was identified as a potential cancer

fighter in animal studies nearly 20 years ago. (Whether CLA can prevent cancer in people is still unknown.)

For several years CLA was touted as a weight-loss godsend, but that faded as well-designed studies failed to show that it caused significant weight loss. Now, CLA researchers and manufacturers have targeted fat loss as its main benefit.

"A lot of carefully done studies have shown that CLA can prevent fat from being stored in animals," says researcher Peter Jones of McGill University in Montreal.

"But the evidence in humans is inconsistent," he adds. In some studies CLA lowers body fat in overweight adults; in others it doesn't.

That could be because not all CLA is alike. There are some 25 different chemical forms, or isomers, of CLA, Jones points out. "These can have any of several different effects, either alone or in combination. And that could well be responsible for the different results."



Another problem: quality. When Jones tried to buy CLA wholesale for his research, he was quoted prices that ranged from \$36 a pound to \$5,450. "You know that the cheaper stuff is probably going to have a lot of contaminants that could affect the results."

Different purities and formulations could also explain why some re-

searchers have seen side effects in people who take CLA.

For example, Ulf Riserus and his colleagues at Uppsala University in Sweden found that each of the two most-studied CLA isomers, taken separately, increased insulin resistance in obese men with the metabolic syndrome. ^{1,2} But when the men took the two isomers in equal amounts, insulin resistance didn't increase.

(CLA labels don't give a breakdown of the isomers, but Tonalin contains equal amounts of the two.)

Insulin resistance is part of the metabolic syndrome, which is a cluster of symptoms that includes elevated blood pressure, blood sugar, and triglycerides plus low HDL ("good") cholesterol and a large waist. An estimated one in four Americans has the metabolic syndrome, which increases the risk of heart attack, stroke, and diabetes.

The most comprehensive study of CLA ever conducted highlights both its promise and its potential downside.

Jean-Michel Gaullier and his coworkers in Norway gave 93 middleaged, overweight men and women 3.4 grams a day of Tonalin CLA and told them to follow their regular diet and exercise routine.³

After one year, the Tonalin takers had lost, on average, five pounds of body fat while similar people who took a placebo gained close to one pound. Most of the fat was lost during the first six months.

But the Tonalin group also had higher levels of leucocytes (white blood cells), which is a sign of inflammation. And they had higher levels of both thrombocytes (blood-clotting cells) and a chemical cousin of LDL ("bad") cholesterol called lipoprotein(a). All point to an increased risk of heart disease and stroke.

"Further studies are needed to determine if there is an effect of CLA on cardiovascular risk and inflammation," concluded Gaullier and his colleagues.

"As of now, the risks are more documented and the benefits are questionable," adds CLA researcher Darshan Kelley of the U.S. Department of Agriculture's Western Human Nutrition Research Center at the University of California at Davis.

Our advice: until researchers can show that CLA works and is safe, don't try it.

¹ American Journal of Clinical Nutrition 80: 279, 2004.

² Diabetologia 47: 1016, 2004.

³ Journal of Nutrition 135: 778, 2005.

CortiSlim Evidence

"Daily stress—work, relationships, bills, traffic (even dieting)—triggers a hormonal release that signals the body to store fat," says Shawn Talbott, dietary supplement executive and adjunct professor of nutrition at the University of Utah in Salt Lake City. "I formulated CortiSlim to help control this fat-storing hormone."

Actually, a California supplement manufacturer, Steve Cheng, approached Talbott to devise a weight-loss product that they and psychologist Greg Cynaumon could peddle on TV. Since 2003, the three have sold millions of dollars worth of CortiSlim. Their success has spawned dozens of "CortiCompetitors," including CortiDrene, CortiTone, CortiSol, and CortiDiet.

The hormone that CortiSlim is designed to control is called cortisol. Among its many functions: keeping blood pressure up during traumatizing events.

"It's a popular myth that everyday stress raises cortisol levels," says endocrinologist Jonathan Purnell of the Oregon Health & Science University in Portland. Purnell

has tested dozens of Seattle and Portland residents, "people experiencing the kind of normal stresses

of modern life that cortisolsuppressing supplements are promoted to neutralize. The people don't have elevated cortisol."

Do high cortisol levels make people fat? Not necessarily, says Purnell. "Obese people don't have higher blood cortisol levels than lean people."

As for evidence that controlling cortisol levels will help people lose weight, "it hasn't been studied," says Purnell, "because suppressing cor-

tisol levels is a double-edged sword that many drug companies don't want to touch."

Depressing cortisol production enough to keep levels low could put people at risk for shock if they were injured in a car accident or experienced some other trauma. "When we block cortisol production for testing purposes in patients, we do it only in a hospital, where we can treat them in case something goes wrong," says Purnell. "It's not something you should try at home."

And why would you want to? There's no good evidence that the ingredients in CortiSlim or any of its competitors can lower cortisol levels. In fact, Talbott and his partners no longer even say that. Last fall, the Federal Trade Commission (FTC) charged them with consumer fraud for claiming that CortiSlim results in rapid, permanent weight loss of 10 to 50 pounds by lowering cortisol levels.

While they're negotiating with the FTC over fines and penalties, CortiSlim's TV commercials and its Web site shamelessly tout a "CortiSlim Lifestyle" of diet, physical exercise, stress management...and up to \$5 a day of CortiSlim pills.

That's the *real* CortiSlim Lifestyle—making millions by using baseless claims to hawk overpriced pills.

Enovation?

Coming to your neighborhood supermarket soon (if it's not already there): the "revolutionary" new oil, Enova.

"Enova is the first cooking oil clinically shown to help you maintain a healthy weight when used as part of a sensible diet," says the product's Web site (enovaoil.com). "Studies show that, compared to other cooking and salad oils, less Enova oil is stored in the body as fat...."

Ordinary oils like soybean, olive, corn, and canola are composed mostly of fat molecules called triglycerides.

They also contain small amounts of other fat molecules called diglycerides, or diacylglycerides. Enova's manufacturer, the grain-processing giant Archer Daniels Midland, takes a mixture of canola and soybean oil and converts some 80 percent of it into diacylglycerides.

This "DAG" oil, the company maintains, is more likely to be burned for energy than stored in fat cells, as triglycerides are. But it's not clear how that would lead to weight loss. DAG doesn't boost metabolic rate, so if the body doesn't store Enova in fat cells, it's going to store something else instead.

ADM also says that Enova may work by suppressing appetite. Is there anything to the company's claims? Yes...and no.

If you expect to lose weight by switching to Enova as your regular cooking oil, you'll probably be disappointed.

In the largest published study of DAG oil, 65 obese men and women consumed 15 percent of their calories from Enova oil while on a lower-calorie diet for six months. They lost two more pounds than 62 similar people on the same diet who consumed ordinary cooking oil.¹

"That's not much of a weight loss," points out researcher Marie-Pierre St-Onge of the University of Alabama at Birmingham. "What's more, the two extra pounds were lost during the first three months. The study didn't show that people continue to lose weight with a DAG oil."

What about using Enova not to lose weight, but to prevent gaining it?

In a just-completed study, 155 overweight or obese Japanese men and women who weren't dieting were told to substitute Enova for their usual cooking oil. After a year, they weighed an average of two pounds less than similar people who continued to use their regular oil.

Those small changes could add up.

"If a food could prevent a one- or two-pound weight gain every year, that would help adults avoid gradually becoming overweight and obese as they get older," notes researcher Peter Jones of McGill University in Montreal.

But it's too early to know if the unpublished Japanese results are valid and would last beyond a year.

Bottom line: the jury is still out on how much weight, if any, you can lose by switching to Enova. Just keep in mind that, like all oils, Enova contains 120 calories per tablespoon. And expect to shell out two to three times as much as you'd pay for olive, canola, or most other oils.



¹ American Journal of Clinical Nutrition 76: 1230, 2002.