



Q: Is your **MCP** made of grapefruit pectin?

A: **MCP (Modified Citrus Pectin)** is an unique extract of citrus peel which is rich in certain specialized complex carbohydrate molecules. The specific molecules used can be taken from *any* citrus pectin, provided they are the right size (molecular weight must be less than 10 kiloDaltons) and rich in the right sugar-based branching chains (**galactosides**).

Significant evidence exists that these molecules can prevent the binding of cancer cells to various other parts of the body.^{1,3} Many people therefore use **MCP** to support their bodies' resistance to the process whereby cancer spreads from one part of the body to another. Because it doesn't matter *where* these molecules come from, we use a different mix of



citrus pectins for each batch of our **MCP** product, depending on what's most readily available. Our **MCP** product may be high in grapefruit pectin one month, but contain nearly none the next. In terms of the purposes to which **MCP** is put by most, there's no difference. It's the extract, not the material.

Usually, when people ask your question, they're interested in using the product to support healthy cholesterol balance. While we offer many excellent products which research suggests support healthy cholesterol balance, we don't offer a grapefruit pectin product tailored to this use. While **MCP** can be used for this purpose, it isn't specifically designed to

meet these users' requirements: the galactoside chains probably may not enter into the effect, and in fact products which contain a higher molecular weight complex carbohydrate mix probably work better. **MCP** is inherently a fairly expensive product, and people looking to support healthy cholesterol balance would probably be spending too much money, for not *quite* the right product.

Q: When should I take my **Carnosine**?

A: An excellent question! Many people are being advised by other companies to take their **Carnosine** at the beginning of a meal, so as to put **Carnosine's** anti-glycating powers to work in the blood when blood sugar levels are high. However, we recently came across a scientific paper⁵ which report that **Carnosine** is not just

passively absorbed in the gut, but requires a specific protein to transport it out of the intestines and into the bloodstream. The presence of other **dipeptides** (molecules composed of two amino acids, like **Carnosine** itself), in the intestines, creates competition for this transporter, and increasing the concentration of one dipeptide can significantly inhibit the absorption of another.⁵

Most foods contain proteins and/or dipeptides. So any food which you eat will increase the concentration of proteins and dipeptides *other than Carnosine* in your digestive system, either directly or indirectly. Furthermore, two other papers^{6,7} show that even increasing the amount of

amino acids in, or the carbohydrate concentration of, a solution (which also mimics the situation after a meal) can reduce the amount of **Carnosine** your body will absorb from it.

As these papers show, almost any food you eat will interfere with your body's ability to absorb **Carnosine** supplements. Because of this fact, **it is extremely important that you take your Carnosine on an empty stomach.** That means about two hours *after* your last meal or snack, and half an hour *before* your next one.

References

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We want to hear from you!

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Don't forget to include your name and location.