Dynamic Chiropractic

NUTRITION / DETOXIFICATION

Cutting-Edge Compounds: Piceatannol

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Piceatannol[1] is a metabolite of the powerful phytochemical resveratrol, which is a polyphenolic compound found in grape skins, bilberries, blueberries, cranberries and peanuts. Resveratrol has been studied for its effects on longevity, heart disease and cancer by its *in-vitro* ability to increase vasodilation and reduce platelet aggregation, oxidation and pro-inflammatory enzyme activity. The compound has increased the lifespan of yeast, worms and fruit flies.

Animal studies have been promising for the inhibition of some lines of cancer cell growth. Animal studies on heart disease have been mixed with high doses showing both benefit and harm.[2] However, two of the worlds five documented zones of extreme longevity consume dark red wine that is very high in polyphenolic compounds including resveratrol. Once ingested, some resveratrol is converted to piceatannol.

Recently, researchers at Purdue University discovered that piceatannol blocks the development of immature fat cells into mature fat cells (a process called adipogenesis) by binding to their insulin receptors.[3-4] Without insulin, the genes that promote the growth of baby fat cells (which cannot store fat) to adult fat cells (which *can* store fat) are never activated.

More research is needed and we won't be seeing any products anytime soon, but the beauty and simplicity of the process made it worth writing about. Needless to say, the implications for such a supplement are beyond huge. In the meantime, it's another reason to suggest your patients toss some red grapes and blueberries in their smoothies and protein shakes.

References

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