

Chocolate Cravings- Is it Genetic?

By Karen Crawford, MS, RD, CSP

In my experience, people are either crazy for chocolate or they are indifferent. Being indifferent, myself, I have often discounted those who claim that they are crazily addicted to chocolate as being simply without self control and looking for excuses to indulge, uncontrollable of course. However, based on a study printed in a respectable peer reviewed journal, *Journal of Proteome Research*, there may be a molecular difference which truly divides the human race.

Using a process called nutrimetabonomics, a team of researchers were able to examine the effect that chocolate has on one's metabolism. The study participants were all men in order to avoid the ever fluctuating hormones in women. The men were divided into two groups, those who regularly desire chocolate and those who do not. They were then placed on a strict diet for 5 days which included a one 50 gram dose of chocolate. Plasma and urine samples were taken through out the week in order to see the varying levels of chemicals based on intake.

One thing is for certain, there was a statistical difference in the plasma profiles of those who crave chocolate on a regular basis and those who do not. That in itself is pretty interesting! The urine profiles also indicated a difference in gut micorflora between the two groups. Do these finding validate one's chocoholic tendencies? Not necessarily, but more importantly, the researchers believe that eating certain foods lead to a "metabolic imprinting" which means that we could possibly influence the chemical reactions in our bodies and move our "cravings" in a more positive direction. This information transcends beyond chocolate and could be used to assess various eating regimens and diets for effectiveness and hopefully increase compliance.

Although this study was pretty small, 22 men, nutrimetabonomics is a very cutting edge approach to metabolism research and has delivered some very thought provoking results. Eating healthfully could become a lot easier if we were not constantly combating undesirable cravings.