Did You Know?

What comes to mind when you think of Valentine's Day? Why, hearts of course! While we celebrate Valentine's Day in February, it's also a good time to remember that hearts are about health, too. Did you know that according to the American Heart Association, more than 83 million American adults have heart disease? Your diet can have a significant effect on reducing the risk of developing cardiovascular disease.

ARS studies show that oats, olive oil, and nuts not only are heart-healthy foods but can also be easily incorporated into your diet.

Along with beneficial fiber, oats contain other heart-healthy substances. For example, ARS scientists discovered that compounds in oats, called "avenanthramides," significantly suppress the ability of blood cells to stick to artery walls, thereby reducing inflammation. This helps prevent atherosclerosis—a build-up of fatty deposits that narrow arteries.

Walnuts are heart-healthy. ARS studies showed that hamsters that ate feed containing walnuts, equivalent to 3-8 handfuls a day, had significantly lower levels of endothelin, a protein that can cause inflammation of arteries and growth of plaque that can clog blood vessels.

Don't like walnuts? Peanuts are another good choice. They contain resveratrol, the same compound found in red grapes and wine. ARS researchers found that resveratrol can counteract the artery-damaging effects of a high-fat diet.

Finally, let's consider olive oil. Researchers found that phenolic compounds in olive oil can positively modify genes that are involved in inflammation, thus reducing heart disease risk.

Volunteers ate breakfast containing virgin olive oil with either high-content phenolic compounds or low-content phenolic compounds. Then ARS researchers tracked more than 15,000 genes in the volunteers' blood cells. Results indicated that 79 genes were "turned down" by the high-content phenolic olive oil. Several of those genes are known promoters of inflammation that typically accompanies metabolic syndrome, which is linked to strokes, diabetes, and cardiovascular disease.

So when you think of hearts, remember that ARS scientists are doing their part to help keep that vital organ healthy.

*Written by **Nancy Vanatta**, ARS Information Staff.*

Executive Editor
Sandy Miller Hays

Managing Editor
Tara T. Weaver-Missick

Writer-Editor
Mina Chung

Designer-Editor
Carol Nathan

Contributors
Jennifer Friel
Jennifer Gilbert
Tracy Havermann
Joan Lunney
Gary Pederson
Nancy Vanatta