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Cardiovascular Effect of Garlic and/or Tomato Consumption When High Fat/Sucrose Loading Test was Applied in Human

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Garlic is a functional spice containing a large amount of sulfur compounds and flavonoids. It has been used extensively as a food material in Europe as well as in Korea. Garlic and tomatoes are foods that are consumed at the same time, especially in Europe. In animal models of gastric cancer, combined treatment of S-allylcysteine and lycopene has an additive or synergistic effect on antioxidant production. Thus, garlic and tomato extracts could have similar functionalities or show further synergistic effects, even though they have different

chemical composition. Therefore, in this study, garlic powder, tomato extract and the mixture were prepared and compared for their anti-thrombotic effects using a rodent model and human. In animal, garlic powder, tomato extract and a mixture of both were analyzed for anti-thrombotic effects using a collagen and epinephrine induced thrombosis model. For human, the effect of garlic and/or tomato on endothelial dysfunction induced by the PhenFlex test (PFT) in healthy male smokers was confirmed.