3B-110: Pork Consumption and serum irisin levels in type 2 diabetes

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Aims and Objectives
This study explored the potential for consumption of pork, as a source of protein, to enhance irisin production and favourably influence biomarkers of insulin resistance in adults with type 2 diabetes.

Key Findings
1. Regular consumption of pork for 4 weeks does not influence plasma irisin levels in people with type 2 diabetes.
2. Including pork in the diet marginally (but significantly) reduced body fat content and increased muscle percentage.
3. Regular pork consumption does not adversely affect blood measures of "health" i.e. blood lipid levels or glycemic indices or body weight despite an increase in energy intake.

Application to Industry
In conclusion, we provide proof of concept that despite no change in irisin levels, regular consumption of pork does not worsen glycemic control or increase cardiovascular disease risk in people with type 2 diabetes. On a positive note, inclusion of pork in the diet resulted in a small but significant improvement in body composition (muscle mass).