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Antisense spuds

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Unmodified starches present a problem to the frozen food industry as they tend to result in poor texture upon cycles of freeze-thawing. In the March issue of *Nature Biotechnology*, Jobling *et al.* describe a genetic solution to generating freeze-thaw-stable starch (*Nature Biotechnology* 2002, **20**:295-299). They created potato plants with reduced levels of the three starch synthase genes using triple antisense technology. The authors showed that there was an efficient downregulation of the three enzymes, and note that this is the first demonstration of simultaneous 'knockout' of three non-homologous genes using antisense technology. Extracts from the amylose-deficient spuds showed remarkable resistance to repeated freeze-thawing. This genetic strategy is superior to currently used chemical modification practices.

References

1. *Nature Biotechnology* , [<http://biotech.nature.com>]
2. Specificity of starch synthase isoforms from potato.