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(54) Title: ENGINEERED PROBIOTICS FOR EXPRESSION OF FIBER-SYNTHESIZING ENZYMES IN GUT

(57) Abstract: The present disclosure provides solutions to various challenges in health, including health challenges related to high consumption of carbohydrate and/or low consumption of soluble fiber. The present disclosure provides, among other things, bacteria engineered for expression of a fiber-synthesizing enzyme, e.g., for expression of the enzyme in the gut (e.g., in the intestine). In particular embodiments, the present disclosure provides bacteria engineered for expression of a fiber-synthesizing enzyme that consumes carbohydrate in the process of synthesizing fiber, e.g., in the gut. The present disclosure further includes formulations of isolated fiber-synthesizing enzymes for administration to subjects.



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