CLAIMS

1. A method of extending the shelf life of a baked bread product containing wheat flour, comprising ~~providing for addition~~ adding to a dough mix containing at least a portion of the wheat flour in the baked bread product recipe, an integrated shelf life extender composition which comprises in weight percent based on the total weight of the shelf life extender composition:

a) ~~about~~ from 10 wt.% to ~~about~~ less than 77 ~~80~~ wt.% of ~~at least one~~ a fat composition, wherein the fat is at least one of palm olein, palm fat, palm shortening, palm stearin, refined, deodorized and bleached palm oil, vegetable oil, canola oil, sunflower oil, coconut oil, or a fatty acid selected from palmitic acid, stearic acid, oleic acid, linoleic acid and lauric acid;

b) ~~about~~ from 1 wt.% to ~~about~~ 10 wt.% of ~~at least one~~ a hydrocolloid adsorbent, wherein the adsorbent is at least one of a hydrocolloid selected from a gum, carboxymethyl cellulose, hydroxypropyl methylcellulose, inulin cellulose alpha, beta, or gamma cyclodextrins singly or in combination, and oligosaccharides;

c) ~~about~~ from 1 wt.% to ~~about~~ 5 wt.% of ~~at least one~~ a glyceride;

d) ~~about~~ from 1 wt.% to ~~about~~ 5 wt.% of ~~at least one~~ a dough strengthener, wherein the dough strengthener is at least one of sodium stearoyl lactylate (SSL), albumin, or egg protein;

e) ~~about~~ from 1 wt.% to ~~about~~ 10 wt.% of ~~at least one~~ a flavour component.

2. The method of claim 1 further comprising adding to the dough mix about 0.5 wt.% to about 2 wt.% of the shelf life extender composition, based on the total weight of the baked bread product ~~recipe~~.

~~3. The method of claim 2 further comprising incorporating the dough mix containing the shelf life extender composition into the baked bread product recipe.~~

~~4~~3. The method of claim 1 wherein the baked bread product is white bread.

~~5. The method of claim 1, wherein the fat is at least one of palm olein, palm fat, palm shortening, palm stearin, refined, deodorized and bleached palm oil, vegetable oil, canola oil, sunflower oil, coconut oil, or a fatty acid selected from palmitic acid, stearic acid, oleic acid, linoleic acid and lauric acid.~~

~~6. The method of claim 1 wherein the adsorbent is at least one of a hydrocolloid selected from a gum, carboxymethyl cellulose, hydroxypropyl methylcellulose, inulin cellulose alpha, beta, or gamma cyclodextrins singly or in combination, and oligosaccharides.~~

~~7~~4. The method of claim ~~6~~ 1 wherein the gum is selected from xanthan gum, guar gum, tara gum, acacia gum, tragacanth gum, karaya gum, locust bean gum, gellan gum, and cellulose gum.

~~8~~5. The method of claim 1 wherein the glyceride is at least one of a monoglyceride, a diglyceride or a medium chain triglyceride of at least one fatty acid.

~~9. The method of claim 1 wherein the strengthener is at least one of sodium stearoyl lactylate (SSL), albumin, or egg protein.~~

~~10~~6. The method of claim 1 wherein the flavour component is at least one of fatty acids, lactic acid, propionic acid, lactones, aldehydes, ketone, diketones, pyrazines, thiazoles, furfural, acetyl furan, maltol, amino acids or dairy cultures.

~~11~~7. The method of claim 1 wherein the shelf life extender composition is made by the ~~method~~ steps comprising:

melting the at least one fat composition, optionally comprising oil;

adding the glyceride and dough strengthener to the melted fat/oil composition with agitation or high shear mixing to form a liquid oil phase;

adding the hydrocolloid adsorbent and ~~optionally~~ the at least one flavour to the liquid oil phase with mixing or agitation to form a homogenized continuous oil phase; and,

allowing the homogenized continuous oil phase to cool and solidify.

~~12~~8. The method of claim ~~11~~ 7 wherein the shelf life extender composition is made by a batch mixing process in a heat jacketed vessel, including heating the vessel for melting the at least one fat composition by hot water and/or steam circulation in the vessel jacketing.

~~13~~9. The method of claim ~~11~~ 7 wherein the homogenized continuous oil phase is packaged in a container and allowed to cool and solidify in the packaging container.

~~14~~10. The method of claim 1 wherein the shelf life extender composition is made by the steps ~~method~~ comprising:

melting the at least one fat composition, optionally comprising oil;

adding sequentially to the melted fat/oil composition with agitation or high shear mixing:

~~d~~a) the glyceride and the dough strengthener,

~~e~~b) the flavour, water and other water soluble ingredients, and

~~f~~c) the hydrocolloid adsorbent,

to form a dispersed aqueous phase water-in-oil emulsion in a continuous non-aqueous phase; and,

crystallising the continuous non-aqueous phase by cooling to form a viscous paste.

~~15~~11. The method of claim ~~14~~10, wherein the dispersed aqueous phase water-in-oil emulsion in the continuous non-aqueous phase is passed through a dynamic scraped surface heat exchanger to form the viscous paste.

~~16~~12. A method of making a baked bread product containing wheat flour, having an extended shelf life of up to at least 7 days, comprising

preparing a sponge mix containing wheat flour by mixing the wheat flour and other ingredients thereof;

proofing the sponge mix;

adding to a dough mix containing at least a portion of the wheat flour in the baked bread product recipe, an integrated shelf life extender composition which comprises in weight percent based on the total weight of the shelf life extender composition:

a) ~~about~~ from 10 wt.% to ~~about~~ less than 77 ~~80~~ wt.% of ~~at least one~~ a fat composition, wherein the fat is at least one of palm olein, palm fat, palm shortening, palm stearin, refined, deodorized and bleached palm oil, vegetable oil, canola oil, sunflower oil, coconut oil, or a fatty acid selected from palmitic acid, stearic acid, oleic acid, linoleic acid and lauric acid;

b) ~~about~~ from 1 wt.% to ~~about~~ 10 wt.% of ~~at least one~~ a hydrocolloid adsorbent, wherein the adsorbent is at least one of a hydrocolloid selected from a gum, carboxymethyl cellulose, hydroxypropyl methylcellulose, inulin cellulose alpha, beta, or gamma cyclodextrins singly or in combination, and oligosaccharides;

c) ~~about~~ from 1 wt.% to ~~about~~ 5 wt.% of ~~at least one~~ a glyceride;

d) ~~about~~ from 1 wt.% to ~~about~~ 5 wt.% of ~~at least one~~ a dough strengthener strengthener, wherein the dough strengthener is at least one of sodium stearoyl lactylate (SSL), albumin, or egg protein;

e) ~~about~~ from 1 wt.% to ~~about~~ 10 wt.% of ~~at least one~~ a flavour component;

mixing the dough mix containing the shelf life extender composition with the proofed sponge mix;

mixing a shortening component into the dough mix/sponge mix mixture;

optionally moulding the shortening modified dough mix/sponge mix mixture;

proofing the shortening modified dough mix/sponge mix mixture; and,

baking the proofed, shortening modified dough mix/sponge mix mixture.

~~17~~13. The method of claim ~~16~~ 12 wherein the shelf life extender composition is prepared by the method comprising:

melting the at least one fat composition, optionally comprising oil;

adding the glyceride and dough strengthener to the melted fat/oil composition with agitation or high shear mixing to form a liquid oil phase;

adding the hydrocolloid adsorbent and ~~optionally~~ the at least one flavour to the liquid oil phase with mixing or agitation to form a homogenized continuous oil phase; and,

allowing the homogenized continuous oil phase to cool and solidify.

~~18~~14. The method of claim ~~16~~ 12 wherein the shelf life extender composition is prepared by the method comprising:

melting the at least one fat composition, optionally comprising oil;

adding sequentially to the melted fat/oil composition with agitation or high shear mixing:

a) the glyceride and the dough strengthener,

b) the flavouring, water and other water soluble ingredients, and

c) the hydrocolloid adsorbent,

to form a dispersed aqueous phase water-in-oil emulsion in a continuous non-aqueous phase; and,

crystallising the continuous non-aqueous phase by cooling to form a viscous paste.