Claims

1. An oxidized and partially hydrogenated oil or fat, having 10 to 60 wt.% of C18:2 trans-isomer content on the basis of total constituent fatty acid content and having peroxide value from 8 to 350 meq/kg.

2. The oxidized and partially hydrogenated oil or fat according to claim 1, wherein the ratio by weight of the C18:2 trans-isomer content to C18:1 trans-isomer content on the basis of total constituent fatty acids content is between 0.3 and 1.8.

3. The oxidized and partially hydrogenated oil or fat according to claim 1, wherein the oxidized and partially hydrogenated oil or fat is produced by partially hydrogenating an oil or fat and then oxidizing the resultant partially hydrogenated oil or fat.

4. The oxidized and partially hydrogenated oil or fat according to claim 3, wherein the total content of linoleic acid and α-linolenic acid on the basis of total constituent fatty acid content of the partially hydrogenated oil or fat is 10 wt.% or less.

5. The oxidized and partially hydrogenated oil or fat according to claim 3, wherein the oil or fat is edible vegetable oil or fat containing 10 wt.% or more of α-linolenic acid on the basis of total constituent fatty acid content.

6. An oil or fat composition containing the oxidized and partially hydrogenated oil or fat according to claim 1.

7. The oil or fat composition according to claim 6, wherein the oil or fat composition contains 0.01 to 10 wt.% of the oxidized and partially hydrogenated oil or fat.

8. A food product containing the oil or fat composition according to claim 6.

9. A food product cooked with the oil or fat composition according to claim 6.

10. A method of producing an oxidized and partially hydrogenated oil or fat containing C18:2 trans-isomer from 10 to 60wt.% on the basis of total constituent fatty acid content and having peroxide value from 8 to 350 meq/kg, comprising
the step of partially hydrogenating an oil or fat until C18:2 trans-isomer content on the basis of total constituent fatty acid content reaches 10 to 60 wt.%; and
the step of oxidizing the oil or fat until peroxide value reaches 8 to 350 meq/kg.

11. The method of producing an oxidized and partially hydrogenated oil or fat according to claim 10, comprising
the step of partially hydrogenating an oil or fat until C18:2 trans-isomer content on the basis of total constituent fatty acid content reaches 10 to 60 wt.%; and
the step of oxidizing the resultant partially hydrogenated oil or fat until peroxide value reaches 8 to 350 meq/kg.

12. The method of producing an oxidized and partially hydrogenated oil or fat according to claim 11, characterized by heating the partially hydrogenated oil or fat at a temperature from 50 to 200 °C.

13. The method of producing an oxidized and partially hydrogenated oil or fat according to claim 11, wherein the total content of linoleic acid and α-linolenic acid on the basis of the total constituent fatty acid content of the partially hydrogenated oil or fat is 10 wt.% or less.

14. The method of producing an oxidized and partially hydrogenated oil or fat according to claim 11, wherein the oil or fat is edible vegetable oil or fat containing 10 wt.% or more of α-linolenic acid on the basis of total constituent fatty acid content.

Claims

1. An oxidized and partially hydrogenated oil or fat, having 10 to 60 wt.% of C18:2 trans-isomer content on the basis of total constituent fatty acid content and having peroxide value from 15 to 350 meq/kg.

2. The oxidized and partially hydrogenated oil or fat according to claim 1, wherein the peroxide value is from 20 to 350 meq/kg.

3. The oxidized and partially hydrogenated oil or fat according to claim 1 or 2, wherein the ratio by weight of the C18:2 trans-isomer content to C18:1 trans-isomer content on the basis of total constituent fatty acids content is between 0.3 and 1.8.

4. The oxidized and partially hydrogenated oil or fat according to any one of claims 1 to 3, wherein the oxidized and partially hydrogenated oil or fat is produced by partially hydrogenating an oil or fat and then oxidizing the resultant partially hydrogenated oil or fat.

5. The oxidized and partially hydrogenated oil or fat according to claim 4, wherein the total content of linoleic acid and α-linolenic acid on the basis of total constituent fatty acid content of the partially hydrogenated oil or fat is 10 wt.% or less.

6. The oxidized and partially hydrogenated oil or fat according to claim 4 or 5, wherein the oil or fat is edible vegetable oil or fat containing 10 wt.% or more of α-linolenic acid on the basis of total constituent fatty acid content.

7. An oil or fat composition containing the oxidized and partially hydrogenated oil or fat according to any one of claims 1 to 6.

8. The oil or fat composition according to claim 7, wherein the oil or fat composition contains 0.01 to 10 wt.% of the oxidized and partially hydrogenated oil or fat.

9. A food product containing the oil or fat composition according to claim 7 or 8.

10. A food product cooked with the oil or fat composition according to claim 7 or 8.

11. A method of producing an oxidized and partially hydrogenated oil or fat containing C18:2 trans-isomer from 10 to 60wt.% on the basis of total constituent fatty acid content and having peroxide value from 15 to 350 meq/kg, comprising
the step of partially hydrogenating an oil or fat until C18:2 trans-isomer content on the basis of total constituent fatty acid content reaches 10 to 60 wt.%; and
the step of oxidizing the oil or fat until peroxide value reaches 15 to 350 meq/kg.

12. The method of producing an oxidized and partially hydrogenated oil or fat according to claim 11, comprising
the step of partially hydrogenating an oil or fat until C18:2 trans-isomer content on the basis of total constituent fatty acid content reaches 10 to 60 wt.%; and
the step of oxidizing the resultant partially hydrogenated oil or fat until peroxide value reaches 8 to 350 meq/kg.

13. The method of producing an oxidized and partially hydrogenated oil or fat according to claim 12, characterized by heating the partially hydrogenated oil or fat at a temperature from 50 to 200 °C.

14. The method of producing an oxidized and partially hydrogenated oil or fat according to claim 12 or 13, wherein the total content of linoleic acid and α-linolenic acid on the basis of the total constituent fatty acid content of the partially hydrogenated oil or fat is 10 wt.% or less.

15. The method of producing an oxidized and partially hydrogenated oil or fat according to any one of claims 12 to 14, wherein the oil or fat is edible vegetable oil or fat containing 10 wt.% or more of α-linolenic acid on the basis of total constituent fatty acid content.