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FACTS ABOUT

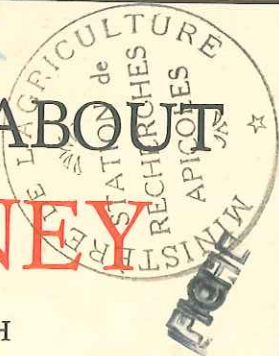
HONEY

WITH

Selected Recipes



BEEKEEPING ANNUAL OFFICE  
HARLOW . . . . . ESSEX



# FACTS ABOUT HONEY

By HERBERT MACE

“The Queen was in the parlour  
Eating bread and honey.”

The old nursery rhyme is a complete answer to those who say honey is only a form of sugar. Let them try eating bread and sugar!

Factory sugar is a dismal product of industrialism, which robs nearly everything of its individuality and variety, for sugar is so devoid of flavour that it is only used as a base for something else. Instead of eating honey, a pure natural sugar flavoured in infinite variety by the floral essences, we are reduced to using sugar flavoured artificially and expensively—from boiled sweets at 2 ozs. a penny to liqueur chocs. at 5/- per lb.

Real natural foods like milk, fruit, green leaves, and nuts are best eaten raw, and this is true of honey. I would stress the importance of this, for I believe if we can only bring the public to appreciate honey, it need not be used in any other way. Meantime, its use in cookery and medicine is valuable, and I have given some of the best recipes. Native honey is far superior to the general run of imported and is well worth the extra price charged for it.

When buying comb honey see that full weight is obtained. A section may weigh as little as 9 oz. or as much as 17, but between 15 and 16 oz. gross weight is Grade A. It should be fully sealed, except, perhaps, a few empty cells round the edge. Unsealed honey attracts water and may ferment. The best beekeepers send their comb honey out wrapped in cellophane or cartons. Care must be taken not to bruise the comb. If, when held to the light, the comb appears semi-transparent, it contains fresh honey, generally light. If opaque, either the honey is dark, or it has crystallized. Some prefer it in this state.

Run honey may be bought in tins, glass jars, or waxed paper pots. On the whole, though costly, glass jars are best, being cleanly, and when fitted with proper caps, quite airtight. Do not buy honey which is thin and runs freely, for this contains a high percentage of water and may ferment.

Crystallized or granulated honey, when pure white, is from a light honey; dark honey becomes yellowish or brownish when crystallized.

## SOME VARIETIES OF BRITISH HONEY

**Fruit and Tree Blossom.** Dark, strong flavour, soon granulates. Kent, Midlands, and forest districts.

**Sainfoin.** Lemon-yellow, mild flavour, comb bright yellow. Cambridge, Cotswolds, etc.

**Clover.** Pale amber, white comb, mild delicate flavour. All districts, specially North and South Downs, Lincs, Norfolk.

**Heather.** Dark brown or purplish, comb snow white. Moors everywhere, especially North of England, Yorks, Scotland, and Wales.

Canada, New Zealand, and the U.S.A. send out excellent honey, but one should avoid any which has been heated or blended, for it is inferior

in flavour. Jamaica exports much honey of good quality, except that, owing to natural conditions, it contains too much cane sugar.

Australian honey is mostly gathered from trees and is strong, sometimes pungently flavoured. Most of the Commonwealth honey is used for blending. European countries consume most of their own honey, and several import more than they export. Great Britain imports about 3,000 tons annually, so it is clear that the home supply is not equal to the demand.

When taken from the flowers by bees, honey contains between 60 to 80 per cent water. By the bees' labour, most of this is driven off and ripened honey contains only about 20 per cent water. Changes also take place in chemical constitution, owing to the digestive ferments in the bee's body. These convert cane sugar into dextrose and lævulose, or "invert" sugar, which is the vital difference between cane sugar and honey.

## ANALYSIS OF HONEY FROM VARIOUS SOURCES

	England	Wales	Nor- mandy	Jamaica	Cal- ifornia
Water loss at 100° C. . . . .	19.1	16.4	15.5	19.5	17.9
Water and loss at high temperature . . . . .	7.6	6.6	5.0	7.6	8.1
Lævulose . . . . .	36.6	37.2	36.9	33.2	37.9
Dextrose . . . . .	36.6	39.7	42.5	35.2	36.0
Cane Sugar (Sucrose) . . . . .	N.D.*	N.D.	N.D.	2.2	N.D.
Wax, pollen, and insoluble matter . . . . .	trace	trace	trace	2.1	trace
Mineral matter (ash) . . . . .	0.15	0.14	0.17	0.26	0.11

\* N.D. Not Determined.

The minute quantities of minerals—a constituent which cannot be too highly regarded—consist of iron, phosphorous, lime, sodium, potassium, sulphur, manganese.

There are also traces of gums, oils, and essences natural to the flowers, while all natural honey contains pollen from the blossoms. The pollen grains, though exceedingly minute, are all different and characteristic of the various flowers, so that it is comparatively easy to ascertain the source of a sample of honey by examining the pollen in it. Foreign honey can often be detected, though sold as British, owing to the presence of pollen from flowers not found in Britain.

The specific gravity of honey is 1.42, and the number of calories per lb.=1,450.

## COMB HONEY

Honey in the comb is the finest obtainable, because it remains just as the bees complete it. Having driven off most of the water, they seal it up in wax cells, which are almost airtight, so that none of the flavour is lost.

Comb honey is naturally more costly, because wax production is expensive. It requires the consumption of about 20 lb. of honey to make a pound of wax. Considerable skill is also required in getting sections of comb properly completed, and generally it is only profitable in good seasons. Comb honey is also a risky article in transport, so that it is naturally higher priced.



To protect it from wasps and flies, as well as dust and moisture, it should be wrapped up as soon as removed from the hive and buyers should insist on having comb packed in this way.

When required for use, the wrapper should be removed and the section laid face down in a dish provided with a cover. A sharp knife should be run round inside the wood, which may then be removed. The comb should be kept covered till used up, otherwise it will not only be visited by wasps and flies, but will lose its flavour and absorb moisture. Most people think dry bread or toast sufficient, but cream or butter go perfectly with honey, and any of the patent cereal foods which are eaten in a dry state may be used with it. The wax, though innutritious, is quite harmless to eat and will scarcely be noticed.

#### EXTRACTED HONEY

Most honey is marketed as run or clear honey because, owing to the saving of wax—the comb is returned to the bees after the honey has been removed by centrifugal force—the yield is much higher.

So far as possible, honey should be packed in the final containers immediately after extraction. In this way there is only very slight loss of flavour. No doubt most British honey is treated in this way, but imported honey generally comes in large cans or barrels, in which it sets hard and must be melted for bottling. This melting needs a high temperature, which not only drives off much of the flavouring essence, but may destroy the natural ferment which is such a valuable aid to digestion. Importers also mix honey from different sources, and so produce a mixture which is uniform in appearance and flavour, but this blending can never be an improvement on the natural mixture produced in the hive, and inevitably results in loss of flavour.

Honey which has been heated granulates or crystallizes very slowly if at all, so that it always remains clear. This is no advantage, for those who prefer liquid honey can always secure it by standing a jar of set honey in hot water. It is better to do this than buy honey which has been melted in bulk and stirred about. Naturally crystallized honey is usually quite hard, and often the bottle has white markings known as "frosting." These are due merely to shrinkage of the honey in crystallization, and have no effect whatever on the flavour or quality. In fact, frosting is the best possible guarantee that the honey has been bottled in a fresh state and the public should select it in preference.

Most connoisseurs prefer crystallized honey and would not think of using it in a liquid state, but clear honey is delicious on bread, bread and butter, or toast and its slight laxative quality renders it more desirable than marmalade as a breakfast sweet for many people. For sweetening porridge, it is better than sugar, and is specially acceptable with the dry cereals popularized from America.

**Grape Fruit and Honey.** Scoop a hole in the pulp and pour in two or three teaspoonsful of honey. This is a delightful combination.

**Raspberries and Honey.** Put the hulled raspberries in a deep glass dish. Spread cream to cover, squeeze a few drops of lemon juice on and pour honey over all. Allow to stand a few minutes and stir till the berries are soaked.

## SELECTED RECIPES

### HONEY CAKES

In cake-making, honey has definite advantages, but it must be used with judgment or it is by no means economical. Cakes made with

honey keep moist longer, but if too much is used or unskilfully blended they become too heavy.

Ideally, honey cakes should be free from other flavouring, so that the delicate taste of honey is perceptible, but fruit and spices are commonly used.

— **Plain Honey Cake.** Beat well together  $\frac{1}{2}$  pt. sour milk, 6 oz. sugar, and 4 oz. honey. Work this well into 10 oz. flour. Bake in buttered tins half to three-quarters of an hour and serve hot.

**Honey Teacake.** 1 cupful honey,  $\frac{1}{2}$  cupful sour cream, 2 eggs,  $\frac{1}{2}$  cupful butter, 2 cupsful flour, 2 teaspoonsful baking powder. Mix and bake as the preceding.

**Honey Sponge.** 1 cupful honey, 1 small cupful flour, 5 eggs. Beat the yolks and honey together, and whip the whites to a cream. Mix all, add lemon or other flavouring, and bake in a slow oven.

**Honey Shortbread.**  $\frac{1}{2}$  lb. self raising flour,  $\frac{1}{4}$  lb. butter,  $\frac{1}{2}$  lb. honey. Work these well together and mix in enough milk to make a stiff dough. Roll out well, cut into shapes, and bake in a hot oven.

**Honey Plum Cake.**  $1\frac{1}{2}$  cupsful honey,  $\frac{3}{4}$  cupful butter,  $\frac{1}{2}$  cupful milk, 3 beaten eggs, 3 cupsful flour, 2 teaspoonsful baking powder, 2 cupsful raisins, 1 teaspoonful each cloves and cinnamon. Mix into a loaf and bake in a slow oven.

**Honey Seed Cake.** Beat up  $\frac{1}{2}$  cupful butter till light. Add gradually  $1\frac{1}{2}$  cupsful honey, 2 lightly-beaten eggs, 1 teaspoonful caraway seeds, 2 teaspoonsful baking powder, and 2 cupsful flour. Mix thoroughly and bake half an hour.

— **Alsatian Gingerbread.** 1 lb. dark honey, 1 lb. flour,  $\frac{1}{2}$  oz. bicarbonate of soda. Melt the soda in a teaspoonful of brandy, heat the honey and mix with the flour and soda. Knead thoroughly, cut into lumps, and bake in a moderate oven.

— **Honey Biscuits.** 1 lb. honey, 2 oz. sugar, 2 oz. butter, a pinch of ginger, and a little grated nutmeg. Mix well together and work in enough flour to make a stiff paste. Roll out thinly, cut into shapes, and bake on a buttered tin in a quick oven.

**Honey Ginger Snaps.** Boil together 1 lb. honey, 1 oz. butter,  $\frac{1}{2}$  oz. ground ginger. When nearly cold, stir in enough flour to make it thick, roll out thin and bake on a greased plate in hot oven.

### HONEY SWEETS

**Toffee.** Put 4 lb. sugar into a pan with  $1\frac{1}{2}$  pts. of water. Heat over a clear fire, stirring till it boils, then cover and boil ten minutes. At  $310^{\circ}$  pour in 1 lb. melted butter. Let this boil well in, then add  $1\frac{1}{2}$  lb. honey, the juice of a lemon, and a teaspoonful lemon essence. Boil another minute and pour into well-greased tins.

**Honey Butterscotch.** Boil 2 cupsful honey till it sets hard when dropped into cold water. Stir in  $\frac{1}{2}$  cupful melted butter,  $\frac{3}{4}$  teaspoonful salt, and a few drops of essence of lemon, almond, or vanilla. Pour on to a cool greased plate, cut into squares, and wrap in waxed paper when cold.

**Honey Fudge.** 1 cupful each castor sugar and demerara sugar to be boiled in a cupful of milk till it will roll into a soft ball when dropped in water. Add a cupful of honey and boil again to the same state. Now add  $\frac{1}{2}$  oz. butter and a tablespoonful of vinegar, mix well and pour into greased tins. Any flavouring or colouring essence may be added for variety.

— **Honey Candy.** Boil 1 lb. honey with  $\frac{1}{4}$  lb. refined sugar and 2 oz. butter till it hardens when dropped into cold water. Turn out into



shallow plates and when cool enough to handle, twist or work into desired shapes.

**Honey Caramels.** 1 lb. honey, 1 lb. sugar, 3 tablespoonsful new milk. Boil till it will roll into a soft ball. Flavour with essence and pour into a greased dish. Before it cools cut into shapes and wrap in waxed paper.

**Honey Ice.** 1 qt. cream,  $\frac{3}{4}$  cupful honey, 1 cupful milk, 1 teaspoonful flavouring essence. Warm the milk, add the honey, and stir till melted, mix with the cream, flavour and freeze.

**Salad Dressing.** One part each lemon juice and clear honey, two parts olive oil. Beat well together and add the stiffly whipped white of an egg and a pinch of salt.

#### HONEY BEVERAGES

**Mead** is one of the oldest known liquors. When well made it is by many considered superior to any wine and is beyond doubt a wholesome and fortifying drink. There are numerous recipes, but in any case the result should be a clear amber, sparkling liquid, not too sweet to the palate.

(1) Use 4 lb. honey to each gallon of water. Boil one hour, skim, pour into a clean cask, and stand till fine.

(2) To each gallon of water use 3-4 lb. honey and the peel of two lemons. Boil half an hour and pour into a cask. While still warm put in a toast spread with yeast and cover the bung-hole with muslin. As soon as it has ceased working, bung tightly and allow to stand at least six months before bottling.

**Effervescent Lemonade.** Mix a few drops of lemon juice and  $\frac{1}{2}$  teaspoonful of honey in  $\frac{1}{2}$  glassful of water. Put in a pinch of bicarbonate of soda, and  $\frac{1}{2}$  pinch of cream of tartar. Drink at once.

**Oatmeal Drink.** Put 2 tablespoonsful oatmeal into a quart jug nearly filled with fresh boiling water and cover for twenty-four hours. In another jug dissolve 3 tablespoonsful of honey in a little boiling water and the juice of 2 lemons. Strain the oatmeal water into this and it is ready for use. May be made with pearl barley instead of oatmeal and lime juice instead of lemons.

#### HONEY AS MEDICINE

From time immemorial, the virtues of honey as a remedy have been fully recognized and even in these days of "patent" medicines many people think of honey only as the best cure for sore throat. That it has high therapeutic value is indisputable. Its chief virtue lies in its high nutritive value. In this respect its superiority to cane sugar is that it passes directly into the system without the aid of digestive juices, hence it will nourish the body in conditions under which even milk fails. It does not, like common sugar, give rise to gases in a weak digestion, so that not only in an atonic state of the stomach, but even when there is ulceration, honey will nourish and stimulate without any unpleasant reaction.

Minute quantities of valuable minerals which are essential in the proper functioning of secretions—such salts as iron, phosphorous, lime, and sulphur—are contained in honey and even when the body will not absorb artificial compounds, those naturally contained in honey are immediately and readily assimilated.

This easy absorption, as well as palatability, make honey the very best medium for the introduction of drugs of many kinds, which would be rejected if taken in any other way.

The soothing effect of honey on sore tissue is proverbial, but it is not so well known that it is antiseptic and one of the most valuable things to apply to burns, abrasions, and so on. Honey is hygroscopic, attracting water almost as readily as salt, so that internally or externally it is always cleansing, and has been proved of value in kidney and bladder trouble.

**Honey Tea.** A tablespoonful of honey in a breakfast cupful of hot water. This should be sipped slowly on an empty stomach. In severe digestive disorder, it will be beneficial to take this three or four times a day, otherwise fasting.

**Honey and Lemon Tea.** Add the juice of half a lemon to the above. This is very useful in liver disorder and for complexion blemishes. Taken as hot as possible before getting into bed it will often ward off a cold.

**Honey and Yarrow.** To an infusion of yarrow add a good spoonful of honey and drink hot at bedtime and on rising. This has been widely recommended for influenza and as a nutrient tonic in general debility.

**Honey and Milk.** Cup of warmed, but not boiled, milk with a teaspoonful of honey. Good for delicate ill-nourished children, and may even be given to infants. Has been highly recommended for cases of stomach ulcer and anæmia. Taken last thing at night, it is invaluable in insomnia.

**Honey and Glycerine.** Cupful of hot water, 2 teaspoonsful honey, 1 teaspoonful glycerine. Taken at night is excellent for colds and sore throat.

**Honey and Elderberry.** 5 spoonsful elderberry syrup, 1 spoonful honey, as much powdered sal prunella as will lie on a sixpence. A teaspoonful at intervals for sore throat.

**Linseed and Honey.** Boil an ounce of linseed in a pint of water half an hour. Strain, add the juice of a lemon and sweeten with honey. Take hot at bedtime.

**Honey and Ipecacuanha.** Tablespoonful of honey, juice of half a lemon, and a teaspoonful of ipecacuanha wine in half a pint of boiling water. Good for whooping cough.

**Cough Candy.** Boil horehound leaves in soft water, strain through muslin, add as much honey as desired to the liquid, and boil till the candy can be made into a soft ball when dropped into cold water. Pour into greased tins to set.

#### OINTMENTS AND COSMETICS

Honey has an unassailable reputation as an emollient, while its water absorbing power makes it of great value in certain skin troubles. Probably its effectiveness in allaying the pain of bee stings led to its use in other forms of inflammation.

The simplest application is to spread clear honey on a cloth and wrap this over the affected part. It is claimed that nothing relieves the pain of crsipelas so readily.

**Honey and Glycerine** in equal parts is excellent for bruises, chafing, and chaps on the face or hands.

**Honey and Flour** in equal parts mixed to a smooth paste. For boils or burns it should be applied to the part and covered with wadding.

**Honey and Bicarbonate of Soda** in equal parts should be mixed and applied to burns or stings.

**Inflamed Eyes.** A few drops of clear honey put in several times a day is soothing and harmless.

**Freckles.** Anoint with a mixture of equal parts honey and cream.  
**Honey and Lavender.** A tablespoonful of honey with a few drops of lavender water.

**Honey of Violets.** Infuse 2 lb. violet petals in 2 qts. of water. Boil up and add 2 lb. honey. Boil to a syrup and press through a linen cloth.

Both the above are grateful applications to tender and sore places, especially useful for the mouth and tongue.



## WHERE TO BUY HONEY

(1) From a local beekeeper known to you as reliable.

(2) Home-raised honey, bottled immediately after extraction, is far the best. The bottle should bear the name of the producer or a guarantee of purity issued by a County Beekeepers' Association in England and Wales, or in Scotland, the Scottish Beekeepers' Association.

(3) From shops in bottles or cans bearing the label of the County Beekeepers' Association which guarantees its purity.

(4) In bottles bearing the National Mark.

**ON NO ACCOUNT** be persuaded to buy cheap mixtures described as "Prepared Honey." These consist largely of glucose or common sugar and are dear at any price.