



Ingredients Identified in Honey

(A partial listing since there are more that are not yet identified)

Carbohydrates

(Sugars)

levulose
(fructose)
dextrose
(glucose)
sucrose
maltose
isomaltose
nigerose
turanose
maltulose
kajibiose
leucrose
netrehalose
gentiobiose
isomaltulose
l-kestose
raffinose
dextrantriose
melezitriose
6-a-
glucosylsucres
panose
isomaltotiose
erlose
3a-
isomaltosulgl
ucose
isopanose
maltotriose
isomatotetraos
isomaltopentaos
e
centose

Amino acids

lysine*
histidine*
arginine
aspartic acid
threonine*
serine
glutamic acid
proline
glycine
atanine
cystine
valine*
methionine*
isoleucine*
leucine*
tyrosine

phenylalanine*

tryptophan*

Enzymes

catalase
diatase
amylase
invertase (suchrase,
saccharase)
glucose oxidase
acid phosphatase

Lipids

palmitic acid
oleic acid
lauric acid
myristoleic acid
stearic acid
linoleic acid
ten unsaturated fatty
acids
three carotenoids

Vitamins

riboflavin
pantothenic acid
niacin
thiamine
pyridoxine
ascorbic acid (Vitamin
C)

Elements

potassium
sodium
calcium
calcium as lime (CaO)

magnesium
iron

copper
manganese
chlorine
phosphorus
sulphur
silica (SiO₂)
silica, crude

Trace elements

aluminum
iodine
boron
titanium
molybdenum
cobalt
zinc
lead

tin

antimony

chromium

nickel

lithium

osmium

beryllium

vanadium

zirconium

silver

barium

gallium

bismuth

gold

germanium

strontium

Acids

acetic acid
butyric acid
citric acid
formic acid
gluconic acid
lactic acid
maleic acid
malic acid
oxalic acid
pyroglutamic acid
succinic acid
glycollic acid
a-ketoglutaric acid
pyruvic acid
tartaric acid
2- or 3-phosphoglyceric
acid
a- or B glycerophosphate
glucose-6-phosphate

Minor constituents

tannic acid
diacetyl
methyl anthranilate
formaldehyde
acetaldehyde
acetone
isobutyraldehyde
propionaldehyde
butyraldehyde
isovaleraldehyde
hydroxymethyltur
furaldehyde (HMF)
methacrolein
methyl ethyl ketone
isopropanol

ethanol

2-butanol

n-propanol

3-pentanol

n-pentanol

isobutanol

3-methyl-2-butanol

3-methyl-1-butanol

n-butanol

b-methallyl alcohol

2-methyl-1-butanol

phenylethyl alcohol

benzyl alcohol

methyl formate

ethyl formate

diethyl ether

Miscellaneous

choline
acetylcholine
inhibine



* ESSENTIAL
AMINO ACIDS –
all 9