



Beschreibende Grafik
- oder Bildunter-
schrift.

**Vitamin C is
one of the
essentials for
healthy
living!**

Germany: Fruits and vegetables - Apple – carrot – raw food salad is healthy.

Easy experiments with vitamins Part I

Materials and tools

two Pasteur pipettes
two petri dishes (or
petri plates)
one small cutting
board
one lemon squeezer
one knife
one lemon
three apple varieties

For example: Granny
Smith, Parmäne, Kaiser
Wilhelm



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The process of the experiment

Step 1
Squeeze out the le-
mon.
Step 2
Cut a slice of each
apple variety.
Step 3
Taste something from
each apple variety and

a little lemon juice and
document the flavour.

Step 4

Place one small slice of
each apple variety with
the cut surface facing
up in the Petri dishes
Sprinkle the apple sli-
ces in one bowl
thoroughly with lemon
juice.

Step 5

Wait for 10 minutes
and document your
observations.

Observation

The apple slices without lemon juice become brownish after some time. There were differences in apple varieties. The sour apple become later and less brown while the sweet ones become faster and stronger brown. On the other hand the

apples with citric acid do not turn brown.



Explanation and Conclusion

The acid in the apples and in the lemon juice is, among other things, ascorbic acid. Vitamin C is ascorbic acid.

An apple slice becomes brown where it is not protected by the peel. The apple reacts with air. It is an oxidation with atmospheric

oxygen. Ascorbic acid acts as an antioxidant. This is a substance that “gives” itself for oxidation and thereby another substance -e.g. the apple slices – is protected.

In the human body, vitamin C also acts as an antioxidant.

Furthermore, vitamin C acts to build up collagen and improves the absorption of iron.

***Eat fruits
and taste
vegetables—
it will
support you
to live better!***

Context

In the human body, vitamin C also acts as an antioxidant.

Furthermore, vitamin C acts to build up collagen and improves the absorption of iron.

Not every food contains vitamin C.

- Lemon tastes sour.
- The sour taste of apples is different.
- Chocolate does not taste sour.

Hot lemon?
Vitamin C is sensitive to heat.

