The pectin substances are heterogeneous -- --
glucides formed by mixtures of polysaccharides
of high molecular weight (gun, mucilages and
pectins) in which intervene the -- --
constitution of the cellular wall of vegetables
especially of fruits and tuberous.
Festin has a high nutritive value, with a true
digestibility of 99% (Van Swaet, 1969). Amongst
the effects caused by the consumption of the
above mentioned substances, the following has
been discovered:

a) 6 to 3.6 g/daily in humans produce minimum
changes in bowel habits. (Cummings, 1979);
and, 3.06 g/day (Nelder, 1979).

b) 2.4 g/daily in humans increased the steat
out put by a 35%, but it disappeared during
the passage through the gut as the result of
bacterial fermentation (Cummings, 1979).

c) It brings down the level of glycemia in
humans. (Jenkins, 1977; Johnson, 1980).

d) It possesses hypercholesterolemic properties
in human serum (Jenkins y col. 1975); in
rabbit serum (Bennett, 1975); in the serum
and liver of rats (Keys, 1961) and in the
joke of egg and small meat (Kotenberg, 1977); these effects may be due to a decrease,
either of the endogenous volume of cholesterole
or of its intestinal absorption.

This work is to investigate the effect which the
addition of 2 and 3% of pectin in pigs fed with cellulose diet, i.e. --
fermentum diet, a brewery by-product sealed
malt sprout, was used, and whose effect has
already been shown by the authors in other
scientific papers, showing that the --
consumption of this malt delayed the speed
of growth, increased the consumption of feed,
and consequently by with a less of feed
--
efficiency, but, what is more important, it
brings about a lessening of back fat and
showing a vast improvement in the quality of
the carcass (Largerea, L. 1978-1980; Karotte,

To pig, with an average initial weight of
43.5 kg, and up to an intermediate
weight of 66 kg 2 kg (growth period) and
from this weight up to 103 kg 1.5 kg.--
(finishing period), weight in which the
animals were killed, there 40 pigs were
delivered, these pigs were submitted to two
different treatments which consisted of the
administration of a diet consisting of a
mixture of carcass (meat, sorgum and barley)
in proportions which ranged from 67 to 75%,
with the addition of malt sprout in a 13% and
206 g in each treatment respectively.

The experimental treatment were given a
further 2 and 3% of pectin in each period.
The chemical evaluations of crude fibre were
of 4 and 5.6%, the crude protein was of 17% and the digestible energy was of
3113 and 3064 kcal/kg of feed for each period of the treatments
with and without pectin, respectively.

Between the average 41 and 66 kg live
weight of the pigs of the consumption of
2.5 g of pectin diet, the digestible weight
(\textsuperscript{1}) there was a highly
significant growth increase (P < 0.01) which
represented a 21.5%, the feed consumption
increased by 6% and the efficiency of the feed
grew by 17%.

The increase of the energy consumption during
this period, in relation to the metabolic
weight (\textsuperscript{2}) was significant (P < 0.05) for
the experimental treatment the consumption of
cellulose being highly significant (P < 0.01)
for the same treatment.

Of the average 66 to 103 kg live weight, the
daily consumption of 2.1 g of pectin per kg
metabolic weight produces a highly significant
reduction (P < 0.01) in the duration time of the
experiment which in turn brings about a
daily gain of 23.4% and which was also highly
significant (P < 0.01), and an increase in the
consumption of an 11% and an improvement of
20% in the feed efficiency. The consumption
digestible energy in relation to the
metabolic weight (\textsuperscript{3}) in the
second period was highly significant
(P < 0.01) for treatment CP, as was also the
consumption of cellulose (P < 0.01) of the
animals in the same treatment.

The addition of a 5% of pectin in a diet
with a 4% of crude fibre for pigs with an
average live weight of 42 to 66 kg, produced
a daily increase of 713 g, with a rate of
feed conversion of 5.6 kg per kilogram
produced as against 537 g, and 4.5 kg,
respectively for the control treatment
(without pectin).

The addition of 5% pectin in a diet with a
5% of crude cellulose for pigs which average
a live weight of 66 to 103 kg, produced
a daily gain of 749 g, and a conversion rate of
4.4 kg per kilogram produced as against 607 g, and 4.5 kg, respectively for the
control treatment. The average thickness of
back fat was 19.8 mm, for the animals --
comparing pectin and 20.6 mm, for the control
treatment.

By this we can see that in small quantities
pectin increases the rate of growth, benefits
greatly the efficiency of a cellulose diet
and contributes favourably to the --
--
diminishing of the back fat.

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