

2. Fluid meat extract is identical with meat extract except that it is concentrated to a lower degree and contains not more than seventy-five (75) and not less than fifty (50) per cent of total solids.

3. Bone extract or stock is the product obtained by extracting clean, fresh, trimmed bones, of animals in good health at the time of slaughter, with boiling water and concentrating the liquid portion by evaporation, after removal of the fat, and contains not less than seventy-five (75) per cent of total solids.

4. Fluid bone extract is identical with bone extract except that it is concentrated to a lower degree and contains not more than seventy-five (75) and not less than fifty (50) per cent of total solids.

5. Meat juice is the fluid portion of muscle fibre, obtained by pressure or otherwise, and may be concentrated by evaporation at a temperature below the coagulating point of the soluble proteids. The solids contain not more than fifteen (15) per cent of ash, not more than two and five-tenths (2.5) per cent of sodium chloride (calculated from the total chlorine present,) not more than four (4) nor less than two (2) per cent of phosphoric acid (P_2O_5), and not less than twelve (12) per cent of nitrogen. The nitrogenous bodies contain not less than thirty-five (35) per cent of coagulable proteids and not more than forty (40) per cent of meat bases.

6. Peptones are products prepared by the digestion of proteid material by means of enzymes or otherwise, and contain not less than ninety (90) per cent of proteoses and peptones.

It will be seen that Meat Extract is found in the market either as a solid mass, usually in cubes; as what may be called the normal Extract containing about 75 per cent of solids; or as a fluid Meat Extract, with solids below 75 per cent. Our Standards require a minimum of 50 per cent. Of the present collection we find:—

Solid Meat Extracts.....	12
Normal " ".....	25
Fluid " ".....	42
Meat Juice.....	1
	80

The ash, representing mineral matters of the meat and added common salt, should not exceed 27 per cent of the total solids; and the salt (sodium chloride) should not exceed 12 per cent.

In all the solid Extracts, the ash and salt exceed the limit named by Our Standards for Meat Extract. Perhaps these Standards should not be held to apply to Meat Extract in the solid form. This is a point for further consideration.

Fat is required to be less than six-tenths of one per cent (0.6) of the total solids. The Petrolie Ether Extract shown in the table, is essentially fat, and is decidedly excessive in 17 samples. With few exceptions these are solid Extracts, and it is possible that the limit for fat may have to be reconsidered in the case of this kind of Extract.

The most important datum is the content of nitrogen. Nitrogen is required to constitute at least 8 per cent of the total solid matter of the extract. This requirement is met by all but four of the samples reported. Two of these are not sold as Meat Extracts (46159, 50139), but as Concentrates of Meat and Vegetables. No. 47014 is slightly lower than Standard requirements, and 39056 is distinctly below the Standard. Nitrogen is present in various combinations, the characteristic, and practically the only ones giving value to these meat extracts being the group known as 'Meat Bases.' These are required to amount to at least 40 per cent of the total nitrogenous compounds.

Many of the samples which meet requirements as to total nitrogen fall short of the Standard for Meat Extracts in this respect. This is due to the fact that proteid