

cooked carrots. But assuming, as one must do for purposes of comparison, that we are dealing with the carrots in the uncooked condition—assuming that we have, not 138 parts of cooked carrots, containing a quantity of water absorbed during cooking, but 100 parts of uncooked carrots in the natural condition—assuming, in short, that the carrots when fresh contained the average proportion of 85 per cent. of water, then the composition of the sample would be as follows:—

Composition of the Carrots when uncooked.

(Based on the fair assumption that the fresh carrots contained the average natural and normal proportion of water, namely, 85 per cent.)

				In 100 parts by weight.
Water	..	..	..	85·00
Dry vegetable matter	..	..	14·09	} 15·00
Dry mineral matter	..	..	·91	
				100·00

The 14·09 parts of dry vegetable matter consisting of:—

Albuminoid matter	..	..	..	1·34
Celluloid matter or fibre	..	..	..	1·58
Fatty matter	..	..	..	·40
Other non-nitrogenous matter	..	..	..	10·77
				<u>14·09</u>

And the 0·91 of dry mineral matter containing (together with other less important substances):—

Alkalies (as oxides)	..	..	..	0·43
Phosphoric acid (i.e. anhydride)	..	..	..	0·11

But, in truth, whether the carrots contain more or less water, is a matter of inferior importance. The question of chief moment is whether or not the components of this food bear to each other a proper ratio, whether or not any of these components have been “washed out,” so to say, during the preserving process, the food maintaining its sensible characters, but having lost some essential constituent, some valuable property. The answer to this question is at once afforded on comparing the figures just given with those (in the next table), showing the average composition of good sound carrots freshly removed from the ground. It will then at once be evident that the preserved carrots are as sound and good as the fresh natural vegetable, and that there is no practical difference between the carrots from the sample tin and carrots cooked within a few hours of their removal from the ground.

Average Composition of fresh uncooked Carrots.

(The figures give averages—calculated by Wolff and Knop—of all trustworthy analyses published up to August 1865.)

					In 100 parts by weight.
Water	..	..	..	..	85·0
Dry vegetable matter	..	..	..	..	14·0
Dry mineral matter	..	..	..	..	1·0
					<u>100·0</u>

The 14 parts of dry vegetable matter consisting of:—

Albuminoid matter	..	..	..	1·5
Celluloid matter or fibre	..	..	..	1·7
Fatty matter	..	..	..	·2
Other non-nitrogenous matter	..	..	..	10·6
				<u>14·0</u>

And the 1 part of dry mineral matter yielding (together with other less important substances):—

Alkalies (as oxides)	..	..	..	0·59
Phosphoric acid (i.e. anhydride)	..	..	..	0·12