

centration of chlorides as the serum, 70% of the calcium and 60% of the total phosphorus. The last 2 figures might have been different if the serum had not contained some albumose.

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Basal Metabolic Rate and Surface Area of Children.

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Owing to the fact that R. E. Scammon had determined the surface area of many of the children in the Institute of Child Welfare, the basal metabolic rates of these children were determined. The measurements made by the Tissot-Haldane method were rejected, partly because there was no graphic record and irregularities in breathing could not be eliminated. The following determinations were made with the Benedict-Collins apparatus. The metabolic rates were not determined on the same days that the surface areas were measured by means of plaster casts and rates were determined on some children whose surface area was not measured directly. Boyd's and Scammon's formula (surface area = $994.5 W^{0.718}$) was found by them to apply to these children and, therefore, it is certain that a correct estimation of their surface area was made on the same day or within a very few days of the metabolic determinations. Therefore, these determinations are of special value as standards. Rates were determined successively on the same child several times a week. During some of the determinations muscle movements were observed and if these are eliminated the averages are as follows:

	Age		Cal. per sq. m. per hour
	Years	Months	
<i>Males</i>	3	3.5	52.2
	4	7.5	56.2
	4	11.5	49.4
	5	— —	60.6 (Slight movements of the hands)
<i>Females</i>	5	1	48
	5	2	51