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THE PHYSICAL WELFARE OF THE DIONNE QUINTUPLETS*

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THIS report of the physical welfare of the Dionne quintuplets covers the period of their first three years of life. It is presented with a hope that it may prove of interest and possibly of some value as well.

ENVIRONMENT

The children's home is situated across the road from the little farm where they were born. It was built in a rather barren field which showed irregular outcroppings of rock through an uneven ground. Since that time a great number of changes have taken place, so that at the present they live in a fully equipped, comfortable home, containing all modern conveniences. Their little estate is made up of about seven acres, and is surrounded by a heavy metal fence seven feet high and topped with barbed wire. The grounds within are prettily landscaped and contain many planted trees, a tiny garden, patches of lawn, and three buildings. At one side of the children's house, or main building, is the observation playground's structure. Here the general public may watch their play (through glass and a fine screen) from a protected corridor. By this means the

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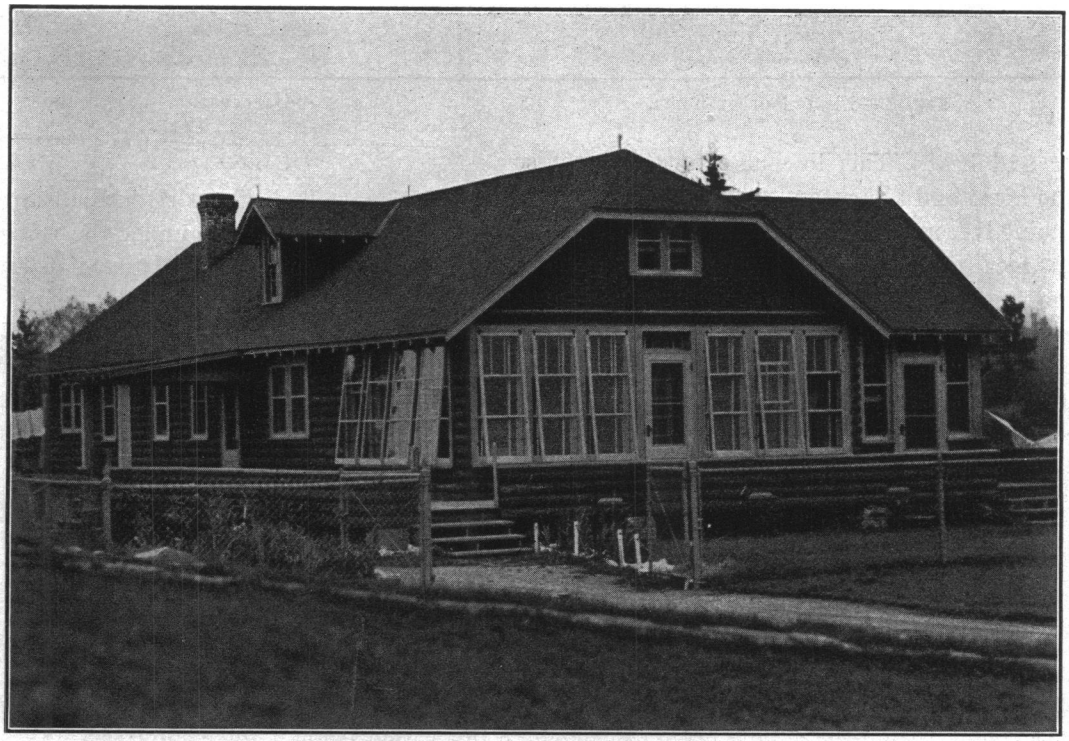

Fig. 1.—Present home.

observation periods are carried out with minimum noise for, and distraction of, the children. On the other side of the central building there is a comfortable duplex structure for housing certain members of the staff. There are a dozen occupied bird houses for the summer feathered visitors, distributed around within the enclosure. During the winter a feeding box is placed outside the nursery window to attract the birds. Electricity is brought out by a special line from the main highway and provides all the buildings with light, and certain equipment therein with power and heat. This line also furnishes the Dionne home and their store. The water supply is obtained from a 68-foot drilled well about thirty feet north-east of the nursery. The sewage from the staff house and children's home is carried to a septic tank, forty yards north-west of the main house. From there the drainage continues to a well tiled field still farther away.

The permanent staff of the children's home consists of nine members, *i.e.*, two nurses and one teacher, three policemen, one housekeeper and two maids. One of the nurses has been specially trained in child-study and education. The policemen and the nurses live in the separate halves of the duplex building. The housekeeper and the maids have rooms in the main building. The three nurses are responsible for the care and training of the children and for carrying out the plans laid down for their early education. They are also responsible for the upkeep of a careful record system pertaining to their health and development. One of the nurses remains with the children each night. The three permanent policemen guard the children twenty-four hours of the day, supervise the observation periods for the general public, and help with many other duties about the various buildings. Further temporary help is needed during the summer, to look after the increased number of visitors.

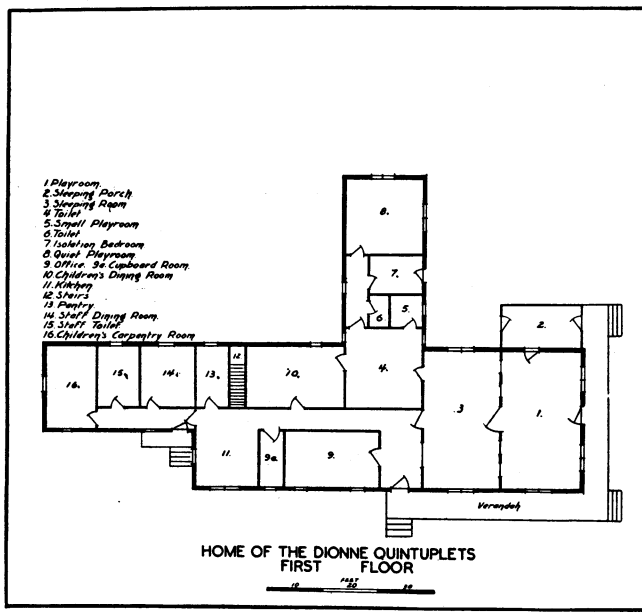

Fig. 2.—First floor of home.

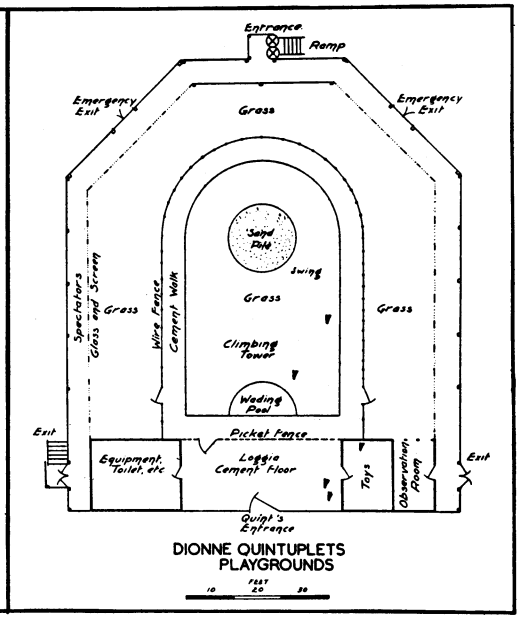

Fig. 3.—Observation playgrounds.

GUARDIANSHIP

The Dionne Quintuplet Guardianship Act which placed the children under the control of the Crown and appointed a guardianship for them until they reached the age of 18 was amended in April, 1937. This Amendment provided for the appointment of the Official Guardian of Ontario as one of the guardians, in place of the Minister of Welfare. There are three other guardians, the father, Judge Valin a retired jurist of North Bay, and Dr. A. R. Dafoe. The guardians, who meet once a month, have full control of all business affairs and other matters pertaining to the children's estate. They make contracts, pay expenses, and generally carry on with the duties associated with the children's care and welfare. The guardians serve without salary but employ a general business manager and a secretary-treasurer, and call

in legal advice to pass on all contracts and other business matters. All accounts are audited monthly by a firm of public accountants.

FINANCIAL ARRANGEMENTS

The income of the children is derived from contracts for motion and still pictures and for endorsements of products used in their home. Every contract must have the complete approval of their medical adviser and guardian and is subject to his interpretation of the possible effect on their physical and mental health. By an Order in Council of the Dominion Government, the use of the words Quins, Quints or Quintuplets and their French equivalents is forbidden for advertising purposes without the permission of the guardians.

The present invested financial holdings of the Guardianship held in trust for the Dionne quintuplets is approximately one-half million dollars. This amount includes the property value ($60,000) of their estate. The capital is invested in Government securities. The income from this capital is used to meet the expenses which amount to about $1,800 per month.

GENERAL CARE AND DAILY LIFE

Carefully observed regularity has been the essential principle followed in the general care of these children. They sleep, eat and play at regular hours, and nothing is allowed to interfere with this routine. For the first 18 months the babies slept 18 hours a day, which included the morning and afternoon periods. After that time one hour was taken off the morning, and at 21 months of age the morning sleeping period was omitted because the children were not sleeping throughout the night. Ever since then they have been sleeping 12 hours at night, and about 1½ hours in the afternoon. "Early to bed and early to rise" has been the rule in the nursery. In this, their third year, after arising and being dressed, they receive their orange juice and then their breakfast. Their play period follows breakfast, and during this time they are given interesting playthings, and occupations are suggested which allow them to use their little imaginations. The nurses are instructed to allow them as much freedom as possible with as little restraint as necessary. Before lunch they have music, songs and group-play for fifteen minutes, followed by a short rest on mats. In the afternoons they play outside again after their sleep. They are bathed just before supper, which is served at 6.00 p.m. They are then undressed and short simple stories are read to them, after which they say their prayers before being tucked into bed. The children are fortunate in having extensive wardrobes. Each one owns a complete ensemble which will suit the contingencies of any kind of weather, and when well they seldom miss their outside play-periods. Their house clothes are light in weight and colour throughout the year. The changing seasons and weather control the arrangements for their outside clothes. Cotton garments are always worn next to their bodies, and woollens are added as the weather becomes colder. They wear socks in the summer and stockings in the early spring, fall and winter. The children are encouraged to hang up their clothes and put away their shoes in their individual cupboards. They are also encouraged to help themselves in the act of dressing. Their teeth are brushed twice a day, and "pretend visits" to the dentist are carried out at intervals, so as to prevent any fear of the dental chair with its inevitable drill when the time comes for attention. There is a portable dental outfit in the home, and one of the nurses makes use of this, acting in the rôle of a dental surgeon. The daily routine also includes caring for their hair, nails and cleansing their hands and faces. Their reactions to these various procedures do not differ in any way from those of other children. Elimination training required considerable attention and patience, but these habits reached a stage of regularity when they were 2½ years old. The children are picked up every night at 9 o'clock, and bed-wetting has been a rare occurrence during the last year. The dining-room was especially designed for the children, and is decorated in white, with simple but attractive furniture. It contains three enamel-covered tables, six small chairs and a buffet. One of the tables is used for serving purposes, with proper containers to keep the food hot. One of the nurses takes her meals with the children and indirectly teaches them good table manners. Grace is said after they are seated, and then they take their dishes in turn for a helping of each course from the serving table. They are not allowed any dessert until they finish their main course, but, finishing that, they may have more than one helping.

After the meal is finished they take their turns in removing their dishes to the buffet and then return to their chairs from whence they are excused. Nourishment in the form of orange juice or acidophilus milk with biscuits is given halfway between meals, in the morning and afternoon.

PHYSICAL DEVELOPMENT

In spite of their prematurity at birth the children have rapidly progressed in their physical development, so that at the end of three years, with the exception of Marie, they have reached or exceeded the normal levels for weight and height. The accompanying charts show graphically this individual progress, together with the increase in a normal child for comparison.

Their general physical characteristics during their first three years of growth have appeared to be normal, with two exceptions. These exceptions were both associated with Marie. She was found to have a small hæmangioma at birth which kept growing fairly rapidly until it reached the size of a 50c. piece. The tumour was treated three times in one year, at six months' intervals, with radon tubes.* The total dosage was 750 millecuries of radium, filtered through 2 mm. of brass and 6 to 9 mm. of felt, and the growth has completely disappeared, leaving a faint purplish tinged area. Then again when she was 20 months old she began to walk with an unusual, slightly waddling gait. The possibility of a congenital dislocation at

* The radium emanations were applied by Drs. Howard and Edmund Kelly, Baltimore, Md.

DEVELOPMENT OF THE QUINTUPLETS

Average	*Weight* lb.	oz.	*Height* inches	*Head* inches	*Chest* inches	*Wrists* inches	*Ankles* inches
Quints at birth	2	11	13	10½	8½	1½	1 1/2
Quints at 3 years	30	8	31½	19½	21	4½	6 1/3
Normal 3 years	30	5	35½	19	19.8	–	–

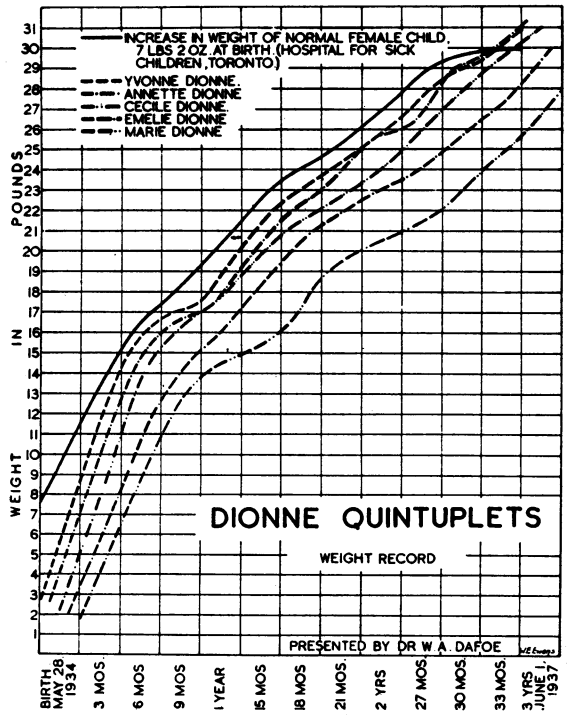

Chart 1.—Weight increase.

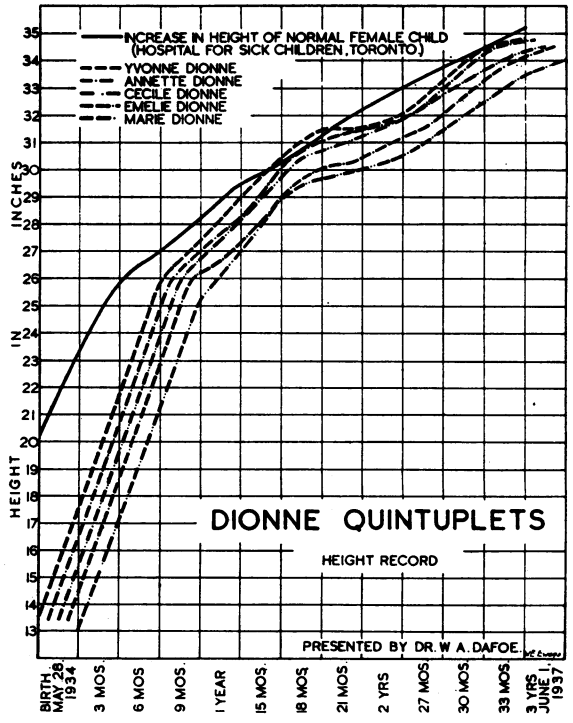

Chart 2.—Height increase.

the hip joints was considered. Dr. Rolph, of the Hospital for Sick Children, Toronto, kindly made an uncomfortable trip in mid-winter to take x-ray films for further information. At the same time films of the children's wrists were taken. The hip joints were found to be normal,

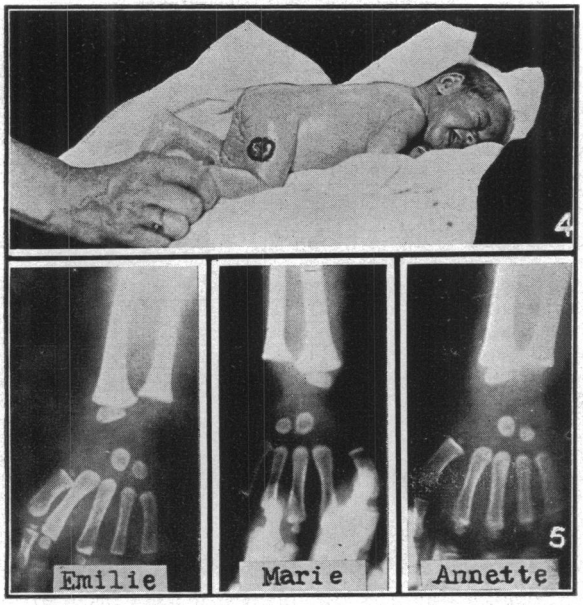

Fig. 4.—Hæmangioma of right thigh—Marie, aged 4 months.

Fig. 5.—X-ray of wrist showing radius and carpal and metacarpal epiphyses.

and it was not long before Marie was toddling around like the others. The x-ray of the wrists showed a slight line of density at the metaphysis of the radius and ulna, which was probably the result of the anti-rachitic diet that the children received. The lower radial and the two carpal epiphyses were present and well developed. The age-appearance of these epiphyses varies according to authorities, but in these children they were found to be within the range of normal. The metacarpal epiphyses were present in an advanced stage of development that is usually found between the ages of 2 and 3.

The eruption times of the deciduous dentition in the quintuplets have been definitely slower than normal. As a common finding, the first teeth in normal children are completely erupted by the end of 24 months (approximately). Here again it must be kept in mind that these children were premature and that there are no statistics available in a group of similar prematurity. Using Logan and Kronfeld's chart for normal human dentition, it is seen that the quintuplets' first teeth erupted from 3 to 7 months after the maximum time-limit given therein. The different types of teeth in both jaws made their appearance at approximately the same time, with the exception of Yvonne's

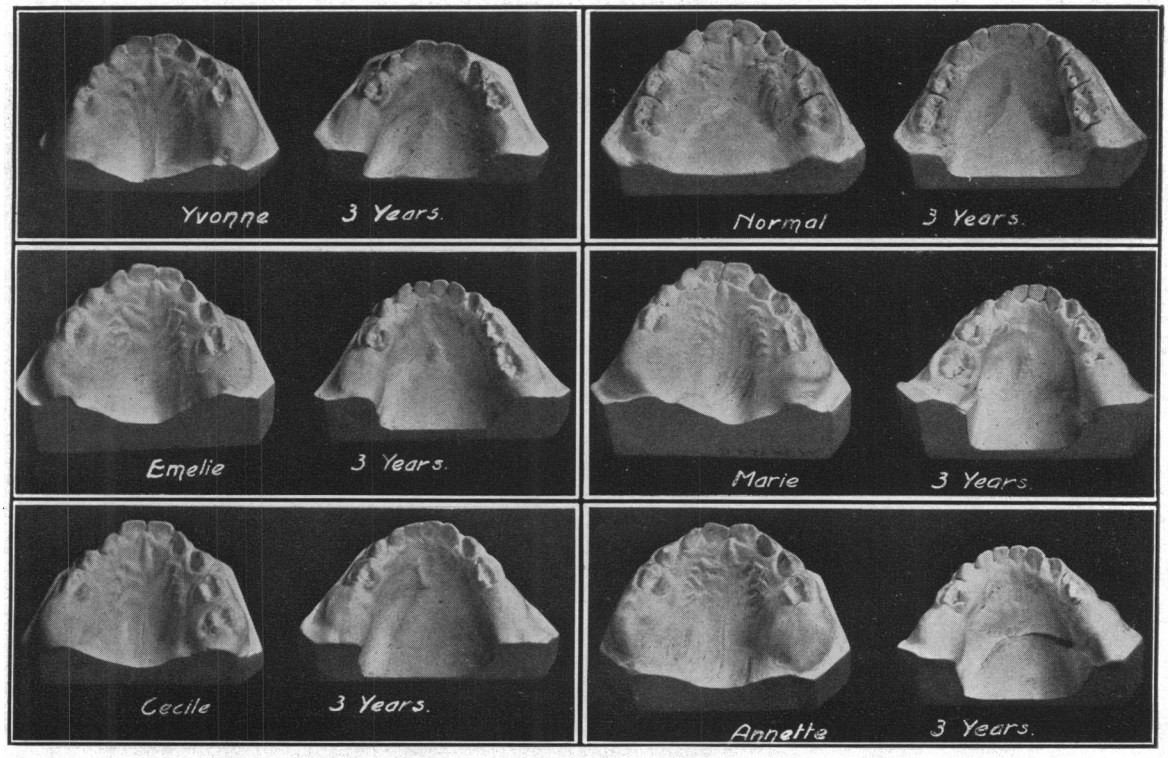

Fig. 6.—Dental casts.

right lower second molar (40 months). The dental casts show that there is tendency towards a narrowing of the arches, which has caused some crowding of the anterior teeth, and thus producing a rotation of the incisors. In Cecile's cast there is a protrusion of the upper central

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Fig. 7.—Marie: two days old.

incisors which are not fully erupted, and this finding is suggestive of a thumb-sucking habit. This protrusion is present, but to a less extent, in Emelie's cast. The over-bite is normal with Emelie and Cecile, but somewhat excessive with the other three. The general alignment of the teeth in all the children is good, and there is no necessity of carrying out any corrective procedures. The only abnormality is found in Marie's double upper right molar. Dental caries is absent, and the teeth are hard in consistency and, with the exception of a greenish-brown stain found on Yvonne's, very white in colour.

ERUPTION OF DECIDUOUS DENTITION
AGE IN MONTHS

	ANNETTE	EMELIE	CECILE	YVONNE	MARIE	QUINT'S AVERAGE ERUPTION.	MAXIMUM NORMAL ERUPTION.*
RIGHT UPPER							
CENTRAL INCISOR	13	14	13	12	14	13	8
LATERAL INCISOR	16	18	15	17	15	16	10
CUSPID	25	27	26	24	24	25	20
FIRST MOLAR	20	21	21	20	20	20	16
SECOND MOLAR	36	36	36	38	37	36	30
LEFT UPPER							
CENTRAL INCISOR	12	14	13	12	13	13	8
LATERAL INCISOR	15	16	14	16	16	15	10
CUSPID	26	27	25	26	26	26	20
FIRST MOLAR	19	19	19	20	19	19	16
SECOND MOLAR	37	38	35	38	36	36	30
RIGHT LOWER							
CENTRAL INCISOR	14	15	11	14	13	13	8
LATERAL INCISOR	16	17	14	17	15	16	10
CUSPID	23	25	23	22	23	23	20
FIRST MOLAR	18	20	19	30	18	21	16
SECOND MOLAR	37	34	37	?	36	?	30
LEFT LOWER							
CENTRAL INCISOR	11	15	12	15	15	14	8
LATERAL INCISOR	16	16	15	16	16	16	10
CUSPID	23	24	23	24	23	23	20
FIRST MOLAR	20	18	19	19	18	19	16
SECOND MOLAR	38	37	36	39	35	37	30

?-ERUPTION NOT COMPLETED SEPT. 26-40 MONTHS
*-"DECIDUOUS DENTITION." (LOGAN AND KRONFELD)

Table I.

NUTRITION

Tables II, III and IV show the details of the children's diet throughout their three years of life. On the whole it has consisted of the five principal foods containing the growth, fuel, repair and roughage elements, together with added vitamines. The various foods were carefully chosen, slowly increased to meet the re-

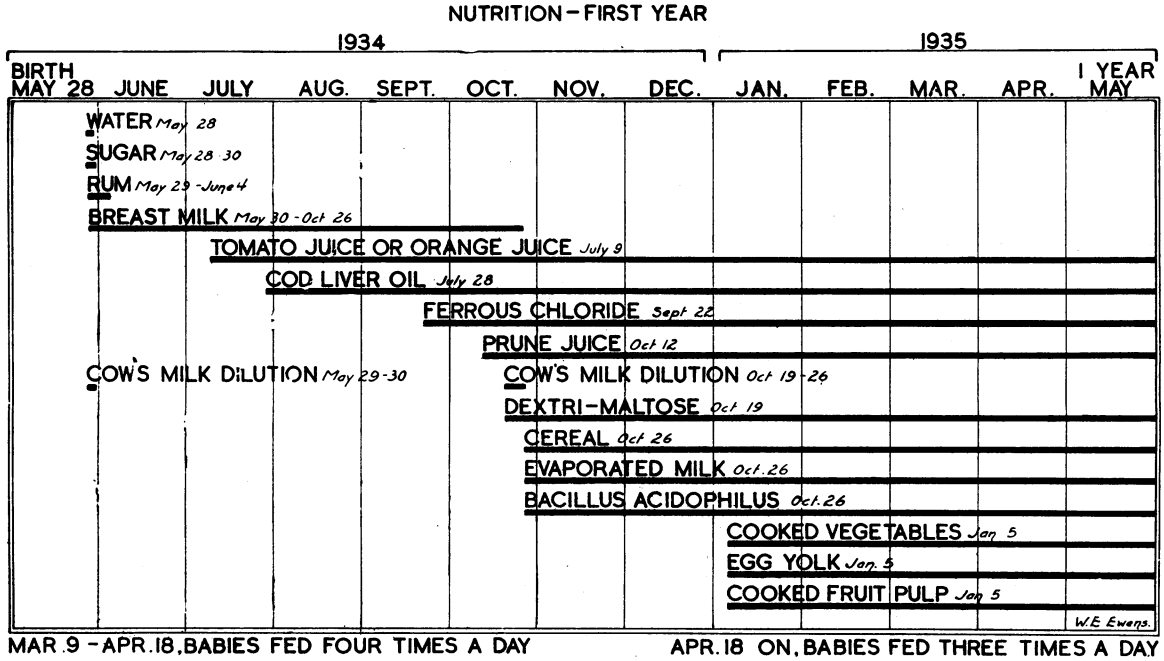

Table II.

quirements of healthy growth and easy digestion. Since the first year there has been no attempt to measure the actual caloric intake, but the normal progressive weight increase, good health, and the almost total absence of gastro-intestinal upsets, outside of infections, appear to indicate that the choice has been a satisfactory one. The menus have been varied and consisted of simple foods which have been carefully prepared. Care has always been observed to see that the foods which have been served were attractive in appearance and palatable to the taste. As a general rule the children have been hungry for their meals, but of course, they have their "off days". The

NUTRITION – SECOND YEAR

	1935							1936				
	1 YEAR JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	2 YEARS MAY
EXTRA VITAMINES.	DAILY COD LIVER OIL ℥i SUMMER, ℥ii WINTER.											
	ORANGE JUICE ℥iv DAILY.											
	FERROUS CHLORIDE. M iii T.I.D. STOPPED AT TWO YEARS – STAINING TEETH.											
CEREALS	OATMEAL, CREAM OF WHEAT, SPECIAL CEREALS.											
	EVAPORATED.											
MILK	ACIDOPHILUS B.											
						PASTEURIZED.						
MEAT	CALVES LIVER TWICE WEEKLY.											
								BACON DAILY.				
									CALVES LIVER THRICE WEEKLY.			
EGGS	CODDLED.											
							SCRAMBLED.					
SOUPS	PLAIN VEGETABLE, CREAMED VEGETABLE (PUREE), BEEF BROTH.											
VEGETABLES	PEAS, SPINACH, CARROTS, ASPARAGUS. – COOKED AND SIEVED.											
								POTATOES.				
FRUITS	APPLES, PEARS, PEACHES, IN SEASON, COOKED.											
	APPLES, PEACHES, APRICOTS, PRUNES – DRIED, COOKED.											
	BANANAS – RIPE, UNCOOKED, CUT FINE.											
DESSERTS	JUNKET, CUSTARD.											
									RICE AND TAPIOCA PUDDINGS.			
MISCELL	BREAD, BUTTER, PLAIN BISCUITS.											

Table III.

DIET SHEETS – THIRD YEAR

WEEK FEB. 1, 1937

	BREAKFAST	DINNER	SUPPER
MONDAY	CEREAL, POACHED EGGS, BACON, BISCUITS, B. BREAD TOAST, MILK.	PEA SOUP, LIVER, POTATOES, RAW CARROTS, B. BREAD, BANANAS, PINE-APPLE JUICE.	CREAM OF WHEAT, BISCUITS, MILK.
TUESDAY	CEREAL, SOFT BOILED EGG, BACON, BISCUITS, B. BREAD TOAST, MILK.	LETTUCE, CANNED VEGETABLES, CARAMEL PUDDING.	PORRIDGE, B. BREAD, MILK
WEDNESDAY	CEREAL, SCRAMBLED EGGS, BACON, BISCUITS, B. BREAD TOAST, MILK.	SOUP, POTATOES, SPINACH, BEETS, CELERY, CUSTARD.	CREAM OF WHEAT, BISCUITS, MILK
THURSDAY	CEREAL, POACHED EGGS, BACON, BISCUITS, MILK.	SOUP, RAW CARROTS, POTATOES, GREEN PEAS, GRAHAM PIE.	CEREAL, B BREAD, MILK
FRIDAY	CEREAL, SOFT BOILED EGG, BACON, B. BREAD TOAST, MILK.	LETTUCE SOUP, POTATOES, SPINACH, CARROTS, JELLO	PORRIDGE, BISCUITS, MILK
SATURDAY	CEREAL, SCRAMBLED EGGS, BACON, BISCUITS, B. BREAD TOAST, MILK.	SOUP, LIVER, POTATOES, STRING BEANS, CELERY, APPLE SAUCE.	CREAM OF WHEAT, BREAD, MILK
SUNDAY	GRUEL, POACHED EGGS, BACON, BISCUITS, B. BREAD TOAST, MILK.	LIVER, POTATOES, SPINACH, RAW CARROTS, PEAS, CARAMEL PUDDING	PORRIDGE, BISCUITS, MILK

WEEK MAY 24, 1937

	BREAKFAST	DINNER	SUPPER
MONDAY	CEREAL, SCRAMBLED EGG, BACON, B. BREAD TOAST, BISCUITS, MILK.	SOUP, LIVER, POTATOES, RICE PUDDING, BISCUITS	CREAM OF WHEAT, SUN WHEAT BISCUITS, MILK
TUESDAY	CEREAL, SOFT BOILED EGG, BACON, BISCUITS, B. BREAD TOAST, MILK.	TOMATO SOUP, POTATOES, PEAS, LETTUCE, BISCUITS, BAKED APPLE.	CEREAL, B. BREAD, BUTTER, MILK
WEDNESDAY	CEREAL, POACHED EGGS, BACON, BISCUITS, MILK	PEA SOUP, CELERY, BEETS, POTATOES, CARAMEL PUDDING, BISCUITS.	OATMEAL PORRIDGE. RUSKS MILK
THURSDAY	CEREAL, SCRAMBLED EGGS, BACON, BISCUITS, MILK.	SPINACH SOUP, LETTUCE, CANNED VEGETABLES, BISCUITS, FLOATING ISLAND DESSERT.	CEREAL, B. BREAD, BUTTER, MILK
FRIDAY	CEREAL, POACHED EGGS, BACON, BISCUITS, MILK.	VEGETABLE SOUP, CELERY, POTATOES, STRING BEANS, BISCUITS, JELLO.	CREAM OF WHEAT, ANGEL CAKE, MILK
SATURDAY	CEREAL, SOFT BOILED EGG, BACON, BISCUITS, B. BREAD TOAST, MILK.	LIVER, POTATOES, LETTUCE, ASPARAGUS TIPS, TAPIOCA PUDDING, BISCUITS.	OATMEAL PORRIDGE, BISCUITS. BUTTER, MILK
SUNDAY	CEREAL, SCRAMBLED EGG, BACON, B. BREAD TOAST. MILK.	SOUP, LIVER, POTATOES, RAW CARROTS, GRAHAM PIE, BISCUITS.	CEREAL, B BREAD, BUTTER, MILK.

FOODS USED

1. EXTRA VITAMINES – COD LIVER OIL, ORANGE JUICE DAILY.
2. CEREALS – OATMEAL, CREAM OF WHEAT, SPECIAL CEREALS.
3. MILK – EVAPORATED – PASTEURIZED – ACIDOPHILUS B.
4. MEAT – BACON, CALVES LIVER.
5. EGGS – SCRAMBLED, SOFT BOILED, CODDLED.
6. SOUPS – PLAIN VARIED VEGETABLE, CREAMED VEGETABLE (PUREE), BEEF BROTH.
7. VEGETABLES – PEAS, SPINACH, CARROTS, ASPARAGUS, CELERY, POTATOES, BEETS, STRING BEANS
8. FRUITS – APPLES, PEARS, PEACHES, COOKED IN SEASON; BANANAS APPLES, PEACHES, APRICOTS, PRUNES (DRIED), COOKED
9. DESSERTS – CUSTARD, JELLO, RICE, TAPIOCA, CARAMEL, GRAHAM PUDDINGS
10. BISCUITS – ARROW ROOT, SUN WHEAT, SODA, RUSKS. BREAD – WHITE, BROWN.
11. BUTTER – ON BREAD, BISCUITS, VEGETABLES.

Table IV.

nurses do not cater to their particular fancies or dislikes, and a minimum amount of coaxing is carried out. The amounts given at first are small, but they may be repeated. Fluids are given at the end of their meals. Iodized salt has been used in all cooking requiring it. The relaxation periods before and after meals appear to have been of great importance as an aid to good digestion.

INFECTIONS

The general protective measures include isolation from the public and the wearing of face masks and gowns by the attendants caring for the children. But in spite of precautions the children developed upper respiratory tract infections which are shown in the accompanying Table. They all received, as special prophylactic measures, three diphtheria toxoid injections at three-week intervals when 1½ years of age. There were no objections from the children when this very important preventive procedure was carried out. After reactions were absent, except for irritability after the first injection. Vaccinations against small-pox was performed on their thighs in January, 1937. Cecile auto-vaccinated herself on her left wrist.

The infections were practically all of the naso-pharyngeal type, and by the time that one child developed the signs and symptoms the others had already been exposed. Isolation of the first one infected did not prevent the infection from developing in the others.

PHYSICAL EXAMINATION

Careful physical examinations of the children have been carried out at intervals since birth. The one completed at the end of the third year showed the following general findings; good general condition and colour, firm tissues, clear lungs, normal abdomens, hearts, and nerve reflexes. Their bodies, in build, posture, muscular and bony development, appeared to be normal. All the children show the local after-results of their upper respiratory tract infections, that is, enlargement of the tonsils and other surrounding lymphoid tissue, and bilateral palpable cervical glands. The examination of their special senses found the ears and noses normal. With Yvonne, Annette and Cecile the eyes were far-sighted, but perfectly normal. Emelie has a little astigmatism in both eyes, but she may never need to wear glasses. Marie has some incoordination of the eye muscles. She does not always use both eyes equally well in looking at objects. We feel that this can be corrected.

ILLNESSES AND INFECTIONS

	1934	1935	1936	1937
YVONNE	SEPT. 15 ALL THE BABIES HAD A MODERATELY SEVERE INFECTION, WITH COUGH, NASAL DISCHARGE, TEMP.++, MARKED DIARRHOEA, CRAMP, DISTENSION - LASTED ONE WEEK.	APR. 19-22 CORYZA, MOD. TEMP., COUGH, JULY 1-8 CORYZA, TEMP.+ OCT. 7-28 CORYZA, VOMITING, TEMP.+ WT. LOSS 13 OZ.	JAN. 1-6 CORYZA. JAN. 27-FEB. 6 CORYZA, VOMITING, DIARRHOEA, TEMP. 104, WT. LOSS 12 OZ. MAR. 7-15 LOOSE STOOLS, VOMITING, WT. LOSS 6 OZ. NOV. 15-19 CORYZA, LOOSE STOOLS. TEMP.+ DEC. 21-27 CORYZA, LOOSE STOOLS. TEMP.+	FEB. 2-6 CORYZA, TEMP.+++ APR. 8-30 CORYZA, ACUTE TONSILITIS, CERVICAL ADENITIS, TEMP.+++ QUITE SICK. MAY 3-12 CORYZA, INJECTED THROAT, CERVICAL ADENITIS, LOOSE STOOLS, TEMP.++
ANNETTE		APR. 19-22 CORYZA, MOD. TEMP., COUGH, MAY 9-10, TEMP. 102 (UNKNOWN ORIGIN.) JULY 1-8 CORYZA, TEMP.+ OCT. 3-NOV. 1 CORYZA, COUGH, VOMITING, LOOSE STOOLS, TEMP.+	FEB. 1-13 CORYZA, TEMP.+ MAR. 7-12 DIARRHOEA, TEMP.+, WT. LOSS 11 OZ. NOV. 14-20 CORYZA, VOMITING, LOOSE STOOLS, TEMP.+ DEC. 21-25 CORYZA, VOMITING, LOOSE STOOLS, TEMP.+	FEB. 3-6 CORYZA. MAY 15-20 CORYZA, INJECTED THROAT, CERVICAL ADENITIS, LOOSE STOOLS, TEMP.++
EMELIE		APR. 15-20 CORYZA ++, COUGH, TEMP.++ OCT. 6-NOV. 2 CORYZA, VOMITING, LOOSE STOOLS, TEMP.+-++	JAN. 1-6 SLIGHT CORYZA. FEB. 2-8 CORYZA, TEMP.++, RASH, EYES BLOODSHOT, WT. LOSS 11 OZ. MAR. 7-13 DIARRHOEA, WT. LOSS 8 OZ. DEC. 24-29 CORYZA, VOMITING, DIARRHOEA TEMP.+	FEB. 5-7 CORYZA. MAY 15-20 CORYZA, DIARRHOEA, CERVICAL ADENITIS, INJECTED THROAT, TEMP.++
CECILE		APR. 19-29 CORYZA, COUGH, TEMP.++ WT. LOSS 6 OZ. MAY 12-14 CORYZA. JULY 1-8 CORYZA. OCT. 3-NOV. 2 CORYZA, VOMITING, TEMP.+ WT. LOSS 1 LB.	FEB. 3-7 CORYZA, VOMITING, TEMP.+ MAR. 7-15 LOOSE STOOLS. NOV. 15-19 CORYZA, VOMITING, LOOSE STOOLS. DEC. 24-30 CORYZA, VOMITING, LOOSE STOOLS, TEMP.+	FEB. 4-7 CORYZA. MAY 15-20 CORYZA, INJECTED THROAT, CERVICAL ADENITIS, LOOSE STOOLS TEMP.+
MARIE		APR. 18-25 ACUTE CORYZA, TEMP.+++ OTITIS MEDIA, DOUBLE PARACENTESIS, INJECTED THROAT. JULY 1-4 CORYZA. OCT. 7-NOV. 1 SORE THROAT, VOMITING, TEMP.++, WT. LOSS 11 OZ.	JAN. 4 CORYZA. FEB. 3-7 CORYZA, VOMITING, TEMP. 103, WT. LOSS 9 OZ. MAR. 7-14 LOOSE STOOLS. NOV. 15-19 CORYZA, VOMITING, LOOSE STOOLS. DEC. 21-27 CORYZA, LOOSE STOOLS, TEMP.+	FEB. 2-4 CORYZA. MAY 15 CORYZA, INJECTED THROAT, LOOSE STOOLS. TEMP.+

TEMP.+ — NORMAL TO 101. TEMP.++ — 101 TO 103. TEMP.+++ — 103—

Table V.

Fig. 8.—At six months. Left to right—Emilie, Cecile, Marie, Annette, Yvonne.
Fig. 9.—At 3 years, 5 months. Left to right—Annette, Marie, Emilie, Cecile, Yvonne.

IN CONCLUSION

The general health and development of the Dionne quintuplets appear to be normal, and there is no evidence of any physical or mental abnormality resulting from their prematurity.

The Medical Guardian wishes to acknowledge the help he has received from Dr. Alan Brown. He is also appreciative of the dental survey supervised by Dr. A. D. Mason and of the examinations carried out by Dr. C. E. Hill and Dr. C. Rae.