

At first glance you may say this is just another photo of Boyer Coe. Well, it is of Boyer Coe, but the more I looked at it the more I realized how unusual it is. I have never seen such muscle formation, such muscle density and hardness of appearance, or such separation of the muscles. This photo was taken by the famed photographer, Arax, for Boyer as he was competing for the Mr. Universe title, which he won. I'm sure that the more you study it the more it will amaze you. Boyer is a regular contributor to Iron Man and will have some more articles in next issue.

"How much can I gain — how fast?" An impossible question, obviously — far too many factors are involved for even the

possibility of an accurate answer; yet averages do exist, and if careful consideration is given to all of the factors, at least some sort of

## Average Expectations From Training

By Arthur Jones

reasonable goal can be established for most new trainees.

Taking one group of thirty-six test subjects, their average starting measurements were as follows — as contrasted to the average sizes that I expected them to reach if they stayed in training for a period of eighteen months:

Expected

| Body Part    | Starting | After<br>18 Mo. | Gain  |
|--------------|----------|-----------------|-------|
| Bodyweight   | 167.19   | 195             | 27.81 |
| Normal ches  | st 37.5  | 45              | 7.5   |
| Rib box      | 33.25    | 37.5            | 4,25  |
| Waist        | 32.2     | 32.5            | .3    |
| R. thigh     | 21.73    | 25.5            | 3.77  |
| L. thigh     | 21.98    | 25.5            | 3.52  |
| R. calf      | 14.93    | 16.75           | 1.82  |
| L. calf      | 14.88    | 17.0            | 2.12  |
| R. upper arn | n 12.96  | 17.0            | 4.04  |
| L. upper arn | n 12.67  | 17.25           | 4.58  |
|              |          |                 |       |

But in order to reach any significant conclusions on the basis of the above figures, it must be remembered that they are "averages." In order to reach the average expected size after eighteen months of training, the lightest subject — with a starting bodyweight of 136 pounds — would have to gain 49 pounds; and the heaviest subject — with a starting bodyweight of 267½ pounds — would have to lose 72½ pounds. At the end of the first eight weeks of training, the lightest subject had gained 13 pounds of bodyweight — and the heaviest subject had lost 10 pounds.

It must also be remembered that the above group of trainees were high school athletes for the most part — almost the entire football squad of a large high school was included; thus the average bodyweight was well above that which would be encountered in a group of subjects selected at random — and the ratio of rib-box size to normal chest size was different from that to be expected in a similar sized group of nonathletes. Having engaged in sports requiring endurance for running, most of these subjects reflected a result of that training in the size of

their lungs.



Although more than fifty per cent of the subjects had taken part in a very limited weight program the previous year, only one of them had much in the way of training experience with weights; this one subject — with approximately eight months of training experience - was stronger than any other subject in the group, and far stronger than the average for the group as a whole. During initial strength tests, he was able to perform 21 repetitions with 260 pounds in the full squat - and the second strongest subject in the group was able to do only one repetition with 255 pounds, with the average performance being far below that. Yet this one perienced subject's bodyweight -174 pounds - was only 6.81 pounds above the average weight of the group, and was far below the weight of the larger subjects in the group.

In the immediately preceding eight months of training, this subject had gained 41.5 pounds of bodyweight and had increased his upper arm size by almost exactly three inches - an increase in the actual bulk of muscular tissue in the upper arms of well over one hundred and forty per cent. At the end of that period of training, his strength performances were as

Exercise Full squats

follows:

Reps & Resistance 21 with 260 pounds 9 with 290 pounds 5 with 330 pounds

Full squats (one leg)

Bench presses Standing presses 5 with 155 pounds Parallel dips

18 with 50 pounds Reg. grip chins 3 with 75 pounds

on bar 18 with 50 pounds Strict barbell

curls 8 with 130 pounds BB wrist curls 17 with 120 pounds

5 with 135 pounds

50 with 65 pounds

7 with 215 pounds

7 with 95 pounds

The above performances were recorded when the subject weighed 174 pounds at a height of 5 feet, 8 inches - he was then 17 years and

5 months of age.

Insofar as flexibility was concerned, a comparison between this subject and any other subject in the group was almost ridiculous; his ranges of movement were far greater in every respect - in some cases by as much as 90 degrees of movement. Without bending his knees, he was capable of touching a point more than ten inches below his feet - and his range of elbow movement exceeded 240 degrees. as contrasted to an average range of movement of approximately 150 degrees. In spite of his far larger than average leg size, he was easily and comfortably able to sit with his buttocks, the entire surface of the backs of his thighs, the entire surface of the sides of his calves and the inside surfaces of his feet all in solid contact with the floor - and this position was in no sense a forced position. No other

Anibal Lopez is a young man who has been fighting for the Mr. America title for a long time and amazes his friends by never quite winning but to those who know him well he is an example of the finest in American manhood and cer-tainly deserves the title and we hope that he soon achieves the Mr. America title with his well proportloned physique. Swan photo.

subject in the group could come anywhere close to assuming this same position -- not even as a forced position.

In spite of having done no running at all for a period of over two years - and very little at any time in his life - this subject was among the fastest in the group in the 100 yard dash, and among the leading five per cent of subjects in

the 660 yard run.

While the above described gains and performances are certainly worthwhile results from only eight months of training, this particular subject fell far below expectations: being almost totally lacking in incentive, he simply refused to push himself in training avoided training entirely if at all possible. Many subjects are capable of doing much better, some simply cannot do as well and incentive is not the only factor involved, although it is an ex-tremely important one, perhaps the most important one.

If a healthy - but underweight - subject trains properly and is provided with the nutritional

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## AVERAGE EXPECTATIONS FROM TRAINING

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requirements, he must gain
weight; but the rate at which he
gains will depend upon many other
factors as well.

During the first eight weeks of the above mentioned test program. another subject gained 18 pounds - from 138 to 156 pounds - while increasing his muscular bulk and strength enormously; during that period, he added two full inches to his upper arm size — a 100 per cent increase in muscular bulk - while increasing his strength in the standing press from one repetition with 80 pounds to one repetition with 155 pounds, and ten repetitions with 130 pounds. In the same period, his squatting strength increased from eight repetitions with 130 pounds to twenty repetitions with 230 pounds - and he added more than four inches to the size of his normal chest.

In all of the cases mentioned above, these results were obtained from a maximum of four hours of weekly training — and in most cases, from less than three hours of weekly training.