

HOW TO USE DR. BERGERSEN'S FACE-HEIGHT DATA CHARTS*

*These charts are for estimates only and it must be appreciated that human variation is not absolutely predictable.

These charts are for estimating the limits of application of the Occlus-o-Guide® appliance: which cases to use it on and which cases are contraindicated or beyond its recommended limits. The charts can also be used to predict the approximate adult face height dimension as well as the remaining anterior vertical facial growth left for the average face height at each chronological age (birthday age).

There are two almost identical charts: one is calculated for actual measurements after compensation for cephalometric enlargement and the other is for direct readings from the radiographic image. The first chart (A) can be used if you are measuring directly on the patient or if you want to create your own charts by multiplying the millimetric measurements by the amount of enlargement your cephalostat produces. The second chart (B) is for use directly from your cephalometric X-ray film measurement which includes approximately a 6.5% average enlargement (60" anode to midsagittal measurement plus about 90 mm midsagittal to film surface measurement). The actual compensation number appears in the CA column under the age and is an average compilation taken from eight various cephalostats at each age together with the patient-film distance that these calculations were made from.

1. Either from your cephalometric film (using Chart B) or directly from your patient with a caliper (using Chart A) measure the distance from Nasion to Menton (N-Me). This measurement is from the naso-frontal suture (Nasion) located at the top of the nose as it curves into the forehead, to the lowest point below the chin (Menton). If the measurement is taken directly from the patient, Chart A can be used, and all the numbers in the chart will be actual calculations for growth with no enlargement estimates added. If the original

measurement is taken directly from the film, the numbers found in Chart B will be enlarged figures with the exception of those in parentheses in columns 8 and 9 which are actual non-enlarged numbers.

For example, for a 10 year old male patient where measurements will be taken directly from your lateral cephalometric head-film, use Chart B. The dimension Nasion-Menton (N-Me) is read and under 10 years the mean is indicated as 109.9 mm. If the reading is 112 mm, the child is within ± 1 S.D. and would have a face height acceptable for the Occlus-o-Guide® since he falls within the acceptable limits of Occlus-o-Guide® treatment of 96.6 to 121.9. He would have completed 86.09% of his face height growth and would have 16.72 mm of actual total face height (N-Me) left and 9.38 mm of lower face (ANS-Me) left. If he had an overbite of 8 mm there would be enough vertical growth remaining to retain the correction optimally. On the other hand, if a male age 14 years old had a face height of 134 mm he would exceed the recommended range for Occlus-o-Guide® treatment. If another 14 year old had 8 mm of overbite to correct, the prognosis of retention would be in question since there would only be 4.43 mm of actual growth remaining or about $3\frac{1}{2}$ mm short of the minimum required.