differential approach (Na U decreased significantly - P<0.03, ANOVA). This was followed by a significant decrease (P<0.001, ANOVA) of both systolic and diastolic blood pressure. The decrease was significant for both the day and night subperiods. The blood pressure decrease was significantly related to the decrease in urinary sodium.

Finally, a relatively small decrease in sodium consumption induced an increase in the number of responder patients from 48% (basal) to 73% during the diet.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>20–29</th>
<th>30–39</th>
<th>40–49</th>
<th>50–59</th>
<th>60–69</th>
<th>70–79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentile resting syst. BP (140 mmHg)</td>
<td>91%</td>
<td>82%</td>
<td>77%</td>
<td>64%</td>
<td>51%</td>
<td>65%</td>
</tr>
<tr>
<td>Exercise BP (100 watts) at this percentile</td>
<td>190</td>
<td>180</td>
<td>180</td>
<td>175</td>
<td>170</td>
<td>180</td>
</tr>
</tbody>
</table>

Key Words: Low Sodium, Diet, Treatment

P-170
NORMAL VALUES FOR EXERCISE BLOOD PRESSURE IN THE ELDERLY IN VIEW OF THE 1999 WHO BLOOD PRESSURE CLASSIFICATION
Burkhard B. Weisser, Thomas Mengden, Hans Vetter. Medical Foliclinic, Univ. of Bonn, Bonn, Germany.

The World Health Organisation (WHO) has published a new classification of blood pressure (BP) in 1999. BP values between 130/85 and 140/90 mmHg are classified as hypertension for all age groups. In contrast to the resting BP normal values, there are still different age-related normal values for exercise BP in the literature. In the present study, 1200 subjects (age 12-88 years) underwent a bycicle exercise test. The percentile of the resting systolic BP distribution at 140 mmHg was calculated for all age groups and the corresponding exercise BP value (100 watts) at this percentile is proposed as normal value (as shown in the table).

Thus, a systolic exercise BP value of approximately 180 mmHg is independently of the age group at the same percentile as a resting BP of 140 mmHg. Using the percentile-method we propose 180 mmHg as normal value for a systolic exercise BP at 100 watts.

Key Words: HEDIS, Digit Preference, Hypertension Clinic

P-172
MORNING BLOOD PRESSURE RISE AND IMMUNOREACTIVE INSULIN IN ESSENTIAL HYPERTENSION PATIENTS
V. V. Radchenko, E. P. Syvshchenko, L. A. Mishchenko. Institute of Cardiology, Kiev, Ukraine; Institute of Cardiology, Kiev, Ukraine; Institute of Cardiology, Kiev, Ukraine.

To evaluate the effect of indapamid (IND) on velocity systolic blood pressure (BP) morning rise and dynamic of immunoreactive insulin (IRI), epinephrine (E), norepinephrine (NE) and angiotensine converting enzyme (ACE) during early morning hours in essential hypertensive (EH) patients.

Nineteen EH pts. have been examined at 6 a.m., 9 a.m. and 12 a.m. before to and after 4 weeks of treatment with IND (daily dose IND was 2.5 mg).

The IRI concentration in blood plasma was estimated by radioimmunoassay and the level of E, NE, ACE by spectrophotometric Method. 24-hour ambulatory BP monitoring was carried out in all pts. Statistical analyses were performed by pair variant Method.

We observed the significant influence of IND on blood plasma vasoactive substance during early morning hours.

After 4 weeks of treatment the IRI concentration was diminished at 6 a.m. from 9.8 mcU/ml to 7.6 mcU/ml (p<0.05), ACE level was diminished at 6 a.m. from 7.9 nmol/ml to 6.6 nmol/ml (p<0.001). At 9 a.m. and 12 a.m. IRI and ACE levels were identical to 6 a.m. After 4 weeks of treatment with IND the early morning BP rise was significantly lower: the velocity systolic BP morning rise was 36% decreased and diastolic BP was 18% decreased.

IND normalizes the IRI concentration, lowers the E, NE, ACE levels in morning hours and prevents the wave of morning BP rise.

Key Words: BP Monitoring, Immunoreactive Insulin, Indapamid