Effects of Growth Promoting Implants on Gains of Nursing Calves
Larry Corah, J. G. Riley, K. Kimple, M. McKee

Summary
Both steer and heifer calves gained significantly (P<.05) faster on summer pasture with growth-promoting implants than calves not implanted. Ralgro, Synovex-S, and Synovex-H were tested, with no significant advantage for one implant type.

Introduction
Because the availability of DES is uncertain, we evaluated—Synovex-S, Synovex-H, and Ralgro, all DES alternatives, for promoting growth of suckling calves.

Experimental Procedure
Eighty spring steer and heifer calves were divided into three groups for the tests. Calves nursed their mothers the summer of 1975 while grazing on native grass near Manhattan. The growth promoting products were implanted the week before cattle went to grass. They consisted of the standard Synovex-S and Synovex-H (for steers and heifers, respectively) and 36 mg. of Ralgro (used in both steers and heifers). Control calves were not implanted. Thirty Hereford steers, 25 Hereford heifers, and 25 part Simmental heifers were studied. Allotments to treatments are listed in table 9.1.

All calves were weighed May 2 and put on grass May 3. Calves were weaned from their mothers and weighed November 14. Weight gains for the summer were for 194 days (May 2 to November 14).

Results and Discussion
Steers implanted with Ralgro and Synovex-S gained significantly more (P<.05) than control steers (table 9.1). Similarly, heifers implanted with Synovex-S and Ralgro gained significantly (P<.05) more than control heifers. There was no significant difference between calves implanted

a Synovex-S and Synovex-H provided by Myzon Laboratories, Inc., Des Moines, Iowa.
b Ralgro provided by Commercial Solvents Corp., Terre Haute, Ind.
with Ralgro or Synovex. Implanted steers had a 34 lb. gain advantage over the control steers and implanted heifers, a 17 lb. advantage over control heifers.

Trial results compare favorably with work at other stations testing implant performances.

<table>
<thead>
<tr>
<th>Implant</th>
<th>No. of animals</th>
<th>Average steer gain, lbs.</th>
<th>Difference between control &amp; implanted steers, lbs.</th>
<th>Heifers, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>16</td>
<td>270.1</td>
<td>232.4</td>
<td>---</td>
</tr>
<tr>
<td>Ralgro</td>
<td>16</td>
<td>287.7</td>
<td>17.6</td>
<td>6.5</td>
</tr>
<tr>
<td>Synovex</td>
<td>16</td>
<td>287.2</td>
<td>17.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Synovex-S</td>
<td>16</td>
<td>287.2</td>
<td>17.1</td>
<td>6.3</td>
</tr>
</tbody>
</table>

1 36 mg. Ralgro for both steer and heifer calves.
2 Heifer calves received Synovex-H.

Table 9.1 Gains by nursing calves implanted with indicated products, May 2 - Nov. 14, 1975.