Toxicological evaluation of smokeless tobacco: 90-day feeding studies

ug n H Th oph us J hnn e R Hay s Ryan J P t s Pau H Ay s C a d a D W ams Cha es D Ga ne
R ey o ds T ba co C mpany 50 Re no ds B d W s on Sa m NC 27 05 USA

Introduction

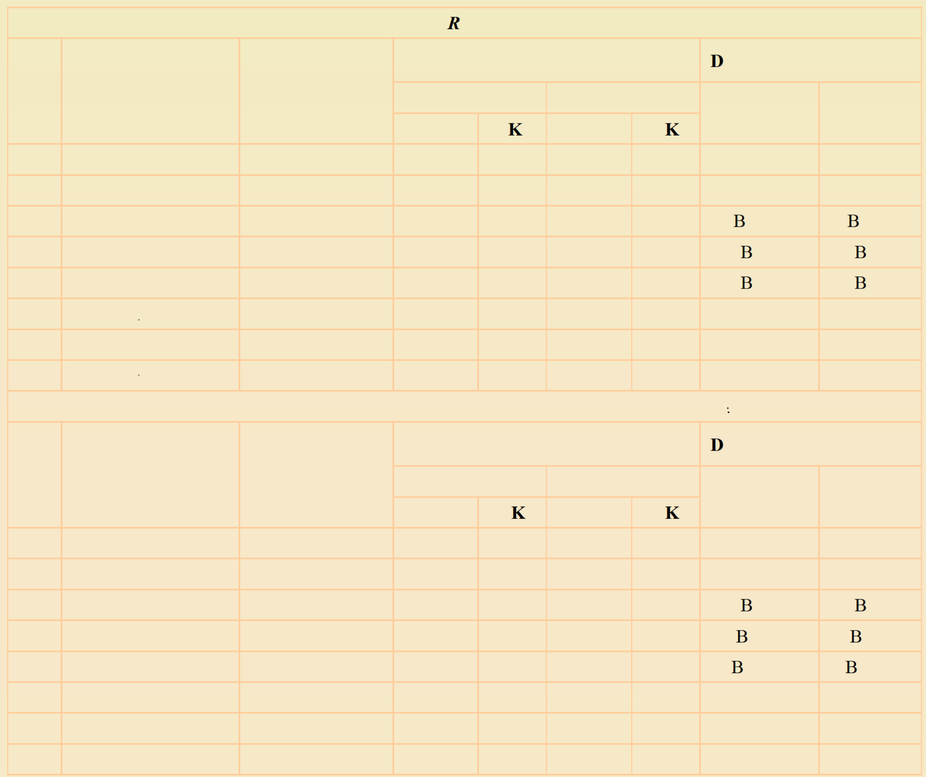
- RJRT nt od ced smo e ss oba co p duc s n he US ma k t and c nduc ed ode t tox o gy s ud s n uppo t of uch p odu ts
- Th s po te p se ts 90 day tu y e u s n m ce and a s
- Goa d f ne t e sub h on c ox co og ca ef ec s of a m ke ess oba co b nd and ts queo s ext ct adm n s e d o o en s n d et

Materials and methods

Te t art c s c nt o s and d e s

- Smoke ss t bac o b nd (B) nd aqu ous ex act o th t b end (E)
- Aqu ous e t act 1 8) ext a t d t 100°F (37 8°C) fo 1 h → e apo a ed at 37 8°C → 8% so ds
- T st a t c es s ab e (b sed on n co ne)
- Neg t ve Cont o (C) d et Pos t ve Co t o N co ne Ta t a e NT)
- B and E o mu a ed mon h y n o d e s us ng NTP 2000 eed
- D ts s ab e and h m gen ous (as d n n ot ne)

Exp r me ta es gn



An ma s

- W sta Han ts a d CD 1 m ce 5-7 we ks o d Cha s R ve L bo ato es Ra e gh NC)
- An ma s a dom ed us ng PATH TOX 4 2 2 Xyb on Med a S s ems Co po a on Ce a Kno s NJ)
- R sea ch c ndu ted n AAALAC acc ed ed f c ty
- An ma s ma ta ned cco d ng to he Gu e o he Ca e and Use of L bo ato y An ma s
- F ed and f e h m n c pa wa e *ad b um*

En po ts

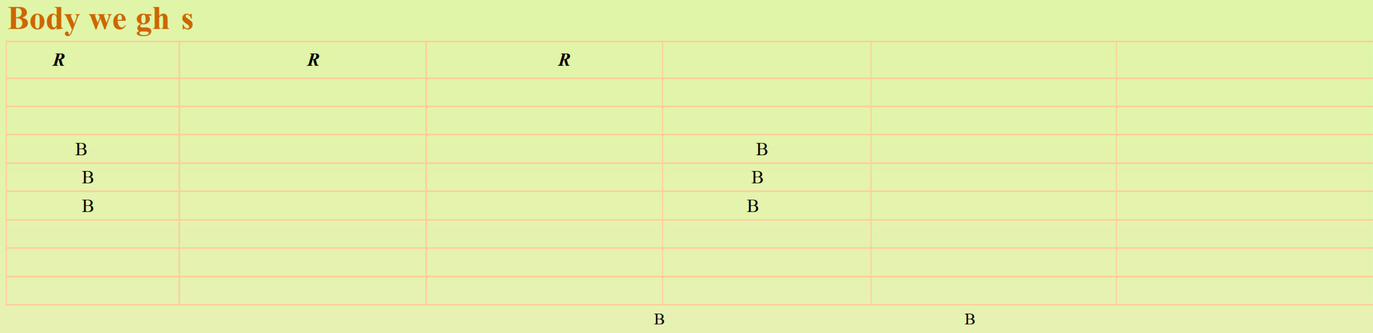
- Mo b nd ty mo a y che ks x ay
- C n a ob e vat o s b fo e exp su e we k y on tu y n c psy
- B dy we g ts be o e a oc t on w ek y n t dy ec opsy
- F ed co sumpt n week y
- Op tha m c exams be o e xpo u e s udy end
- TK wee s 2 4 8 3 (t) 3 5 9 14 (m e)
- C n a ch m s y h m to ogy co gu at on u na ys s
- e m na ody we hts g oss at o gy h top t o gy (co e t su s typ a of 0-d y st d s)
- A so ute o g n we g ts o an body a d o g n b a n we ght at os

S at t cs

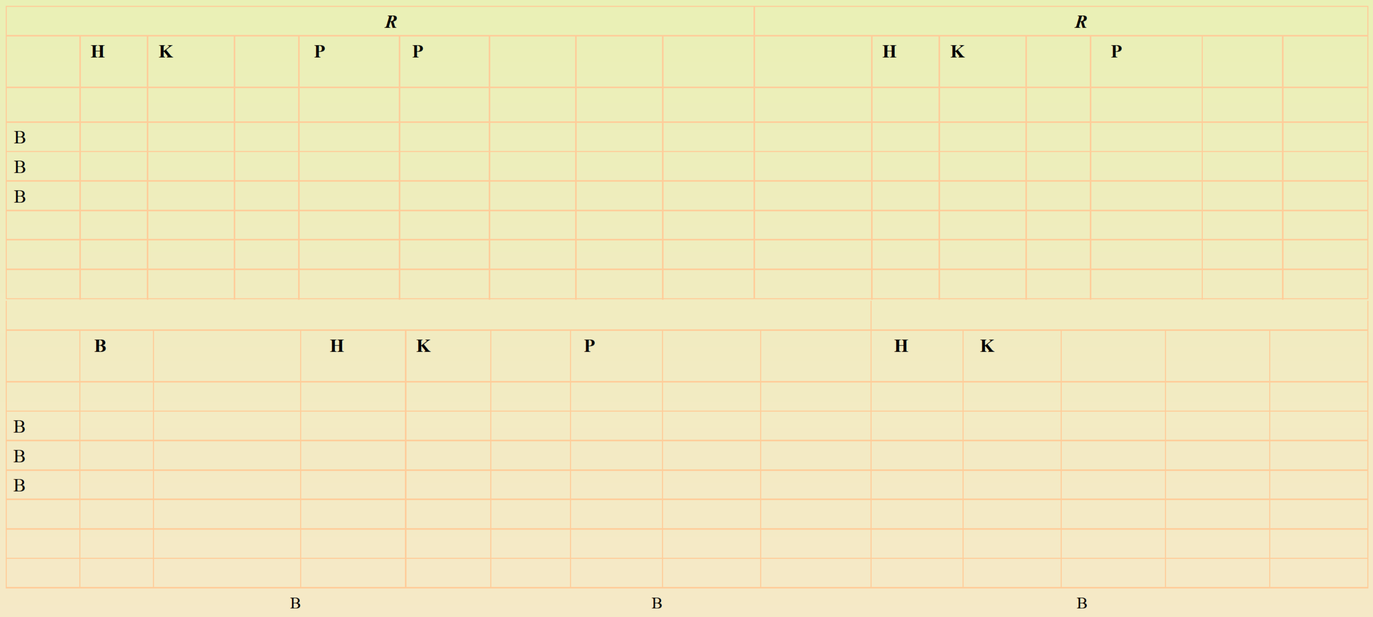
- ANOVA hen Ba t e t s t st o va ance om gene y
- Homo ene us da a Du ne t s t st
- No -h m gen ous da a C ch an and Cox s mod f ed t est
- S gn f c nce 5% 2-s ed c e a
- C vs NT B E NT vs h h ose B E co e pond ng B vs E d se g ou s

Results

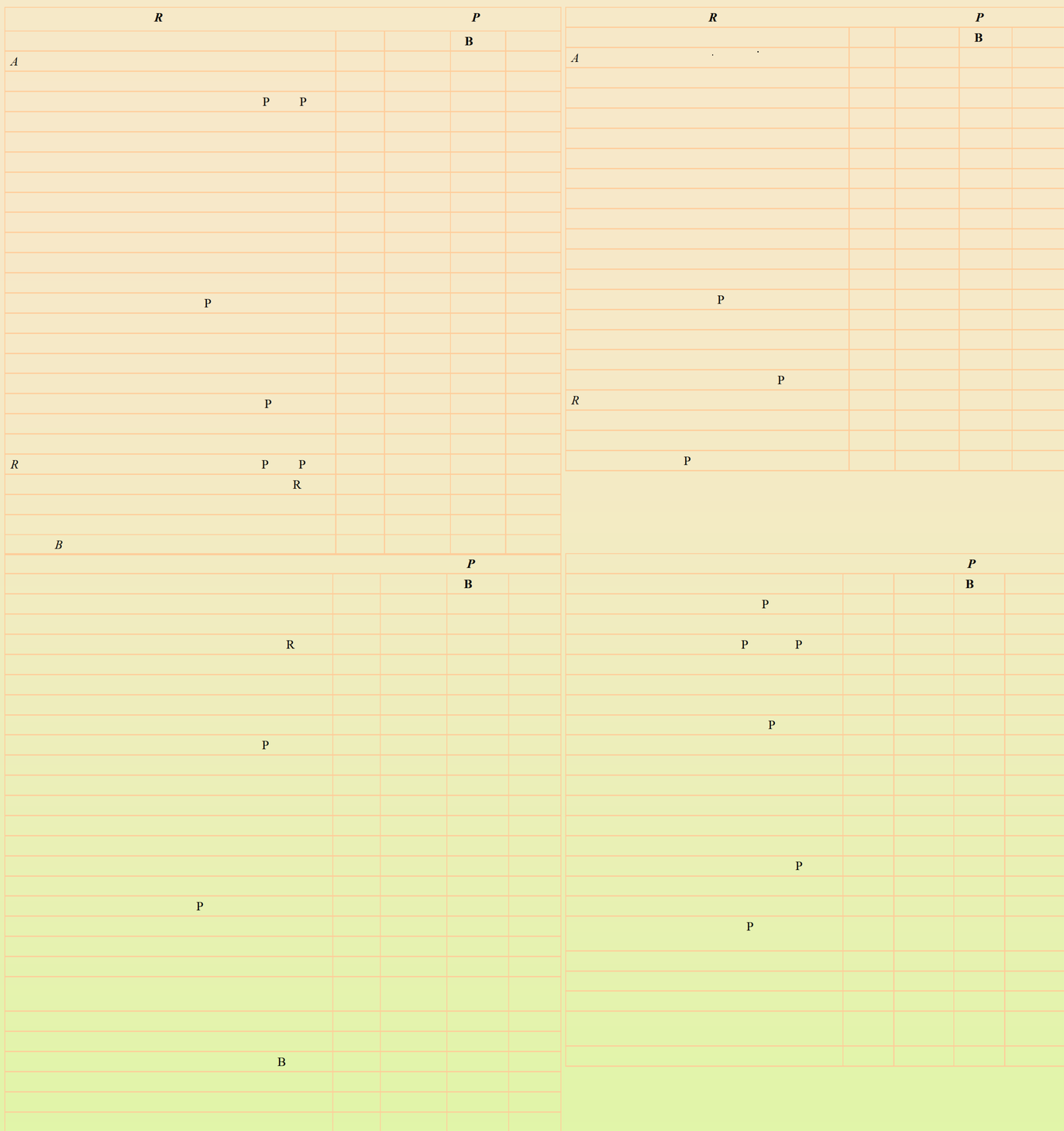
Body we gh s



Org n we gh s



H to atho o y



Conclusions

- Key e f cts ↓ body o gan we gh s (h ghe dos s) w th ut h s opa ho ogy o e at s
- Exp su es app op te (↑ dm n s e ed do e > ↑ p a ma n co ne and c t n e c t n ne >> n ot ne)
- To acco b e d oba co ext ct and n cot e nd ced g ne a y s m a ma n y n cot n c sp nses
- Da a n hese wo new at nd mouse pec es we e co s st nt w th p ev ous at s udy d ta[1]