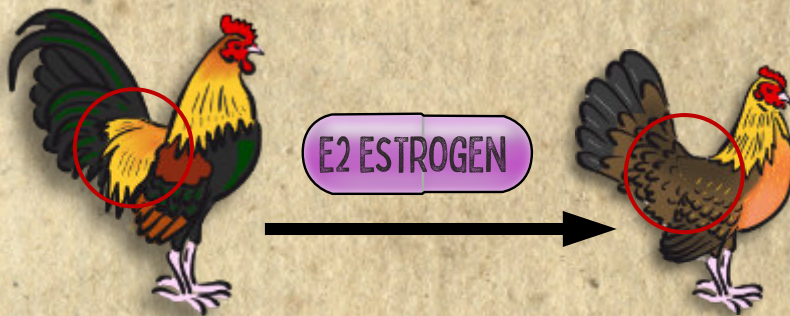


SEXUAL DIMORPHISM

WHAT MAKES A COCK LOOK LIKE A COCK AND A HEN LIKE A HEN?

TEST ON MALE SADDLE FEATHERS SEE RED CIRCLE

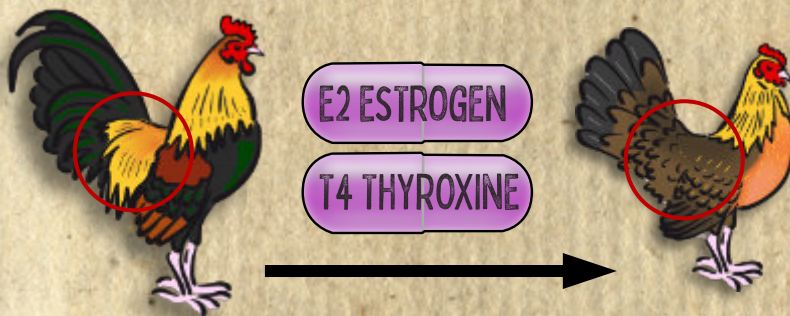
TEXT, ILLUSTRATIONS, PHOTOS: SIGRID VAN DORT
MAY 2025



E2 ESTROGEN ADDED:

↓ DIO3	↓ ASIP	↑ BISK
THYROID	LESS	FEMALE
HORMONE	RED	FEATHER
INACTIVE	PIGMENT	SHAPE

ADD NEXT TO ESTROGEN ALSO THYROXINE



E2 ESTROGEN + T4 THYROXINE ADDED:
STIMULATES ↑ BISK1 & ↑ POMC
INHIBITS ↓ ASIP: **BLACK FEATHERS**
WITH STIPPLING AND NO FRINGES IS
FEMALE FEATHER SHAPE

ESTROGEN PROMOTES SOLID COLOURED VANES BY:

- SUPPRESSING ↓ DIO3 EXPRESSION,
- FORMING STIPPLING BY THE INHIBITION OF ↓ ASIP EXPRESSION
- INDIRECT STIMULATION OF MELANOCORTIN (BLACK PIGMENT) VIA LOCAL ↑ T3 CONCENTRATION.



THE SEXUAL DIMORPHISM OF CHICKEN FEATHERS IS THE RESULT OF INTERACTIONS BETWEEN MULTIPLE HORMONAL SYSTEMS.

REVISITING THE HORMONAL CONTROL OF SEXUAL DIMORPHISM IN CHICKEN FEATHERS - [HTTPS://DOI.ORG/10.1016/J.YGCEN.2024.114601](https://doi.org/10.1016/J.YGCEN.2024.114601) - 3 AUGUST 2024