$$\frac{dN}{d\log E} = \frac{dE}{d\log E}\,\frac{dN}{dE} = \left(\frac{d\log E}{dE}\right)^{-1}\frac{dN}{dE}$$

$$= \left(\frac{1}{E}\right)^{-1}\frac{dN}{dE}$$

$$= E\,\frac{dN}{dE}$$

$$E\,\frac{dN}{dE} = E\,\frac{dv}{dE}\,\frac{dN}{dv}$$

$$= \frac{1}{2}mv^2\left(\frac{dE}{dv}\right)^{-1}\frac{dN}{dv}$$

$$= \frac{1}{2}mv^2\,(mv)^{-1}\,\frac{dN}{dv}$$

$$= \frac{1}{2}mv\,\frac{dN}{dv}$$

$$\frac{dN}{dv} = \frac{2}{mv}\,\frac{dN}{d\log E} = \frac{2}{m}\sqrt{\frac{m}{2E}}\,\frac{dN}{d\log E}$$

$$= \sqrt{\frac{2m}{E}}\,\frac{dN}{d\log E}$$

Um Faktor E falsch!