```
allRolls :: DiceChoice -> DiceState -> [ DiceState ]
                                                              allRolls :: DiceChoice -> DiceState -> [ DiceState ]
allRolls []([], n) = [([], n-1)]
                                                              allRolls [] ([], n) = [([], n-1)]
allRolls [] = undefined
                                                                error "Invariant violated: choices must be same
                                                                 length as vals"
allRolls (chosen:choices) (v:vs. n) =
                                                              allRolls (chosen:choices) (v:vs. n) =
    allRolls choices (vs. n-1) >>=
                                                                  allRolls choices (vs. n-1) >>=
        \(roll, ) -> [ (d:roll, n-1)
                                                                      \(roll, ) -> [ (d:roll, n-1)
            d <- rollList l
                                                                        d <- rollList l
```